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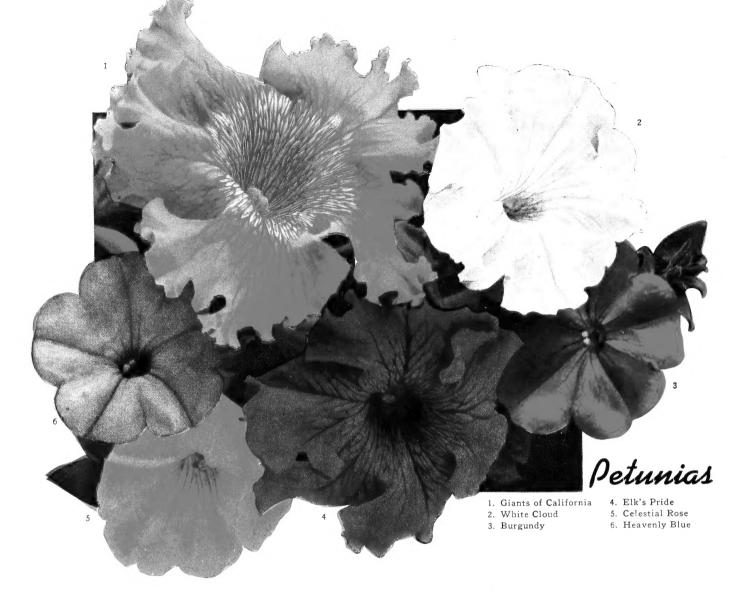


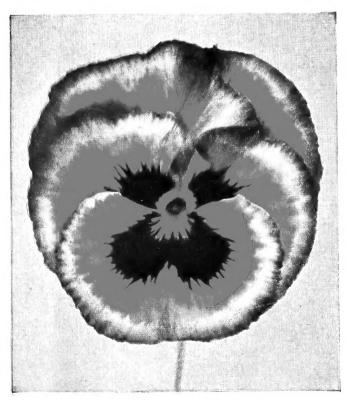
ZENNER BROS. SEED CO.

3718-20 N. E. Sandy Boulevard MUrdock 1101

PORTLAND 13, OREGON











CAMELLIA TYPE TUBEROUS ROOTED BEGONIA

FLOWER SEEDS

Something New

has been added to our catalog this year to help our garden friends to even more successful gardening.

Attached to each group of flowers, either at the family name or at the variety name, you will find the letters "Grp." and a number, which means: Group 1 (or 2, or 3, or 4, or 5).

We have thus classified all flower seeds listed, in 5 groups, according to their cultural requirements. If you wish to know how and when to sow a particular variety of flower, merely look for its Group Number.

Then turn to page 13

Under the heading

How to Raise Our Glower Seeds

you will find your Group Number which gives you the cultural directions you are looking for.

For additional information on soil preparation, watering, etc., see the boxes in the lower right-hand corner of each right-hand page.

AGERATUM (a) Grp. 2

Fluffy blue flowers all summer on dwarf compact plants. Easily grown in any soil. Excellent for edgings or rock gardens.

Midget Blue. Silver Medal All America Selection 1940. Fine dwarf Ageratum 2 to 3 inches high, smothered with small, true Ageratum blue flowers. Pkt. 25c.

Blue Ball. Compact round plants, 6 inches tall, hidden by a mass of pure blue flowers. Fkt. 15c.

ALYSSUM, Madwort

Blooms the entire season; popular for beds and edging in summer, or for growing in pots and boxes for winter bloom.

Carpet of Snow (a) Grp. 2. White flowers on 3-inch plants. Pkt. 10c.

Saxatile compactum (p) Grp. 5. Basket of Gold. Compact plants covered with a wealth of golden blossoms in early spring. 12 inches. Pkt. 10c.

Maritimum (Sweet Alyssum) (a) Grp. 2. Fragrant white flowers all season. Pkt. 10c.

Violet Queen (a) Grp. 2. Neat low plants with an abundance of sweetly scented flowers of a very rich deep shade of violet. Neat in habit and free flowering. Pkt. 15c.

ANCHUSA Summer Forget-Me-Not (a) Grp. 2

A free-flowering annual with charming Forget-Me-Not-like blooms in grace ful sprays from early summer until late

Blue Bird. Deep blue flowers on plants 18 inches tall. Pkt. 10c.

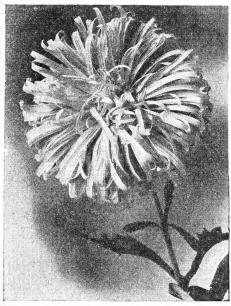
ANTIRRHINUM See Snapdragon

ARCTOTIS HYBRIDS (a) Grp. 4

Autumn Shades. A gay and cheerful member of the daisy family. Dozens of blossoms in many shades of red, orange, and yellow, from early spring onward. Attractive gray-green wavy edged leaves. Mixed, Pkt. 25c.

ASTER (a) Grp. 4

We can imagine no other flower which combines so much beauty and grace with usefulness; or one capable of more brilliant effects. From July until September the Aster reigns supreme in the garden. For these reasons we give a great deal of attention to these flowers and are in a position to offer our patrons remarkably fine strains, producing perfect flowers of great beauty. To do well Asters require a rich soil kept open by continuous cultivation.



CREGO ASTER

American Beauty Wilt Resistant. Robust, branching plants 2½ to 3 feet high. Large double flowers of fine form in early September. Finest mixed. Pkt. 15c.

IMPROVED CREGO WILT RESIST-ANT. The large shaggy flowers with long curled petals are not unlike the ostrich feather for which they are commonly named. The plants are strong, heavily branched and grow about 2½ feet in height.

Blue Flame. Bright navy blue. Pkt. 15c.

Crimson. Glowing deep rose-crimson. Pkt. 15c.

Cattleya. Fascinating shade of orchid. Pkt. 15c.

Purple. Showy violet-purple. Pkt. 15c.

Pink. Beautiful shell pink. Pkt. 15c.

Rose. Lovely bright carmine rose. Pkt.

White. Purest white, large and fluffy. Pkt. 15c.

Crego's Finest Mixed. Pkt. 15c.



AGERATUM

Improved Giants of California. Combining the Crego type of flower with the Beauty Aster's long unbranching stems, this full flowered race of Asters stands at the head of the list. Finest Mixed, Pkt. 15c.

Super Giant El Monte. Deep glowing crimson flowers with an abundance of daintily interlaced plume-like petals. Pkt. 15c.

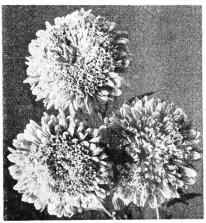
Super Giant Los Angeles. Fully double shell pink flowers 6 to 8 inches across borne upright on long stiff stems. The graceful petals are delicately interlaced. Pkt. 15c.

Aster, Wilt-Resistant, Princess Anne. The blooms have a full crested center surrounded by several rows of strong guard petals of the well known Peach Blossom shade, opening delicate pink and turning rose-pink as the flower matures. Pkt. 25c.

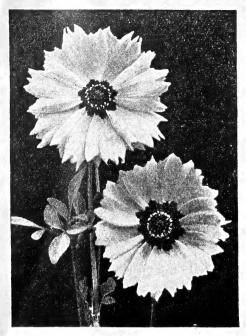
Wilt Resistant Princess Bonnie. Freely producing large blooms of a delicious soft salmon rose shade, which remain in good condition two weeks or more. Long stemmed. Fkt. 25c.

Wilt Resistant Princess Marsha. Vibrant cinnabar scarlet petals contrasting strongly with the rich gold centers of the young flowers. Pkt. 25c.

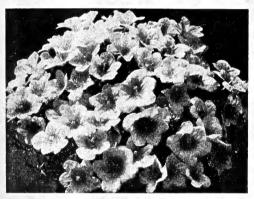
Queen of the Market. Wilt resistant. Fully double flowers 3 inches across on branching stems in early August. 20 inches tall. Attractive Mixture. Pkt. 15c.



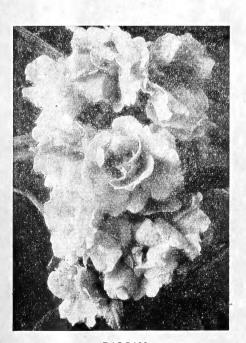
PRINCESS ASTER



CALLIOPSIS GOLDEN CROWN



BLUE FERN FLOWER



BALSAM

BABY'S BREATH, Gypsophila

Airy sprays of white flowers, lovely for bouquets.

Brill'ant Carmine (a) Grp. 3. Dainty bell-shaped blooms Make sowings two weeks apart for continuous flower. Ikt. 15c.

Elegans Grandiflora (a) Grp. 3. London Market Improved. Single large white flowers. Height 2 feet. 1 kt. 10c.

Paniculata Double White (p) Grp. 5. Hardy perennial with sprays of tiny rose shaped blossoms. If cut before the flowers are fully opened sprays can be used in winter bouquets. 3 ft. Fkt. 25c.

Paniculata Single White (p) Grp. 5. Double form of the above. Excellent for fresh or dry bouquets. I kt. 10c.

BACHELOR'S BUTTON or CORNFLOWER, Centaurea

Corn.lower, Jubilee Gem (a) Grp. 3. Compact plants a foot high, literally covered with flowers. 1 kt. 15c.

Cornflower, Cyanus Double (a) Grp. 3. This superb class of Cornflower has handsome large double blooms, 2 to 3 feet tall.

Blue Boy. Pkt. 10c. Pinkie. Fkt. 10c. Snow Man (white). Mixed. Pkt. 10c.

BALSAM Lady Slipper (a) Grp. 2

An old and popular garden flower of easy culture. Gorgeous masses of brilliant double flowers are produced in the greatest profusion. An excellent flower for your shady corner, Height, 2 feet.

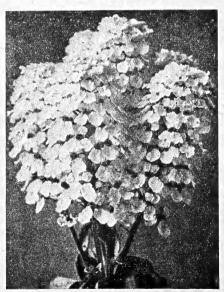
Camellia Flowered. Most improved type. Finest mixed. Fkt. 10c.

BEAN (a) Grp. 2

Scarlet Runner. A rapid climber, flowering profusely; grows 10 to 15 feet high. Edible as well as ornamental. I kt. 10c.

BELLIS English Daisy (p) Grp. 5

This cheerful little perenn al thrives in cool and shady locations. Sow in fall or spring. Mixed. Fkt. 25c.



CANDYTUFT

BLACK EYED SUSAN Thunbergia (a)

Beautiful rapid growing annual climber, preferring a warm sunny situation. Used ex ensively for hanging baskets, vases, low fences, etc. Very pretty flowers in buff, white, orange and other shades, with dark eyes.

Alata. Finest mixed. Pkt. 10c.

BLUE FERN FLOWER Nierembergia

Purple Robe (a) Grp. 4. Bronze Medal All America Selections, 1942. Very dwarf cushion-like plants with flowers of violet blue, In bloom for a long period. I kt. 25c.

BUTTERFLY FLOWER Schizanthus (a) Grp. 2

One of our finest hardy annuals. Showy flowers of various colors, closely resembling some species of Orchids.

Waller Frankl'n Strain. Giant Flowering Hybrids, an extra select, compact, large flowered strain, containing a perfect blend of many colors. Fkt. 25c.

CALIFORNIA POPPY See Poppy

CALENDULA Pot Marigold (a) Grp. 2

Blooms freely in early summer and continues into fall, requiring little care to grow to perfection. 18 to 24 inches high

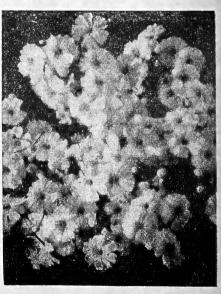
Campfire Improved. A very deep strong orange with distinct scarlet sheen on upper side of each petal. Blooms are flat across top, 4 inches in diameter. Pkt. 15c.

New Sunshine Calendula Chrysantha. A clear Buttercup yellow with loosely arranged petals, incurved at the center, and reflexed at the edges. The foot-long stems are strong and wiry. Pkt. 15c.

Trial Ground Mixed. Chrysantha type. Loose, large, two-toned flowers. Pkt. 25c.

Orange King. Very large, deep orange red with dark centers. I kt. 15c.

Radio. Hemispherical flowers with quilled petals of a rich glowing orange. Graceful and attractive. Pkt. 15c. Double mixed, Pkt. 10c.



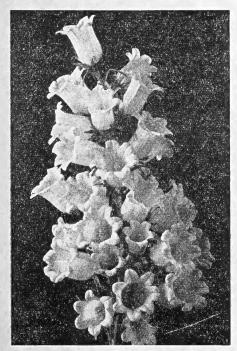
BABY'S BREATH

CALLIOPSIS (a) Grp. 3

Very showy subject for garden decoration and cutting.

Golden Crown. Large fragrant showy flowers of rich orange yellow or gold with maroon center. Fkt. 15c.

Tall Mixed. All double. Contains a wide range of color combinations, mostly bicolored. Fkt. 15c.



CANTERBURY BELLS

CANDYTUFT (a) Grp. 1

Valuable for masses and edging. Highly desirable for bouquets.

Giant White Hyacinth Flowered. Very fine for cutting. Pkt. 15c.

Umbellata Mixed. Tkt. 10c.



CORNFLOWER JUBILEE GEM

CANTERBURY BELLS

Campanula Medium (b) Grp. 5

Calcycanthema, Cup and Saucers. The most beautiful type with large bell- or cup shaped flowers surrounded at the base by a large calyx of a similar color, the whole resembling a cup and saucer. In separate colors, p nk, light blue, dark blue, white and purple. Pkt. 15c. Finest Mixed. Fkt. 15c.

Single. A form with charming pyramids of fluted bells. 2 to 3 feet. Mixed, Pkt. 10c.

CARDINAL CLIMBER (ac)

Graceful climber with cardinal-scarlet blooms 1 to 1½ inches in diameter. Rich, glossy, dark green foliage. Grows 15 feet tall and is in bloom all summer.

Ipomoea Cardinal, Fkt. 25c.

CARNATION (p) Grp. 5

Few flowers surpass in beauty of form or del cious fragrance the richly-hued carnation.

Charaud Giant. 18 inches. This variety blooms six months after seeding and a nationes throughout the summer. The plants, robust and erect, supply handsome, double, clove-scented flowers of ex ra large size. Pink, white, red and yellow. Ikt. 25c.

English Giants Mixed. A most complete collection of cotors including many rare shades. Well grown plants, disbudded to one or two blooms per stem, will produce flowers closely approaching those grown by flor sts. I kt. 50c.

Mixed Colors. Ikt. 25c.

CASTOR BEAN Ricinus (a) Grp. 2

Magnificent, tall, large leaved plants of tropical appearance, succeeding in a warm, sunny location. Beautiful for large foliage groups and background. Height, 10 to 12 feet.

Mixed Varieties. Fkt. 10c.

CLARKIA (a) Grp. 3

A truly charming annual of the most graceful habit, flowering in July. Rose flowers in long racemes.

Elegans. Double choice mixed. Height 2 feet. 1 kt. 10c.

COCKSCOMB

Celosia (a) Grp. 4

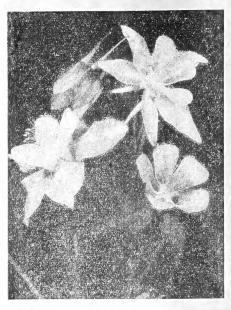
A showy annual producing massive heads of bloom in rich shades of crimson and yellow.

Cristata. Choice mixed. Height 9 to 18 inches. Pkt. 10c.

Plumosa (Improved Feather Type). Choice mixed. Height 8 feet. I kt. 10c.



CELOSIA CRISTATA



COLUMBINE

Aquilegia (p) Grp. 5

These are among the most beautiful of spring and early summer f.owers; very effective when grown in the herbaceous border and groups among shrubbery. Long spurred f.owers on graceful s.ems 2 feet or more above the fern-like foliage.

M.s. Scott ETott's Strain. One of the f nest tail strains ever developed, long-spurred, large flowers, in a sp.endid mixture of co.ors.

Blue. I kt. 25c. Mixture. Pkt. 25c.

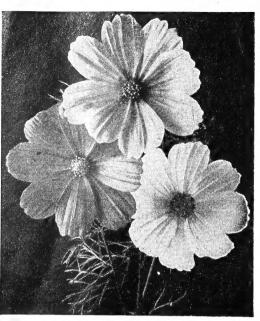
Long Spurred Blue Shades. Larger flowered than the other co.ors, these are of the most beautiful shades of blue ranging from azure blue of the Cambridge Blue Delphiniums through Belladonna to the Forget-me-not, all with a rich cream center. A perennial blooming the first year from seed in most climates. I kt. 25c.

Preparing the Soil



The ideal soil for seed is light and porous but will hold moisture enough to permit good germination.

A good soil mixture for seeding e ther indoors or outside is: ½ light loam, ¼ sand and ¼ granulated peat moss. The addition of leaf mold improves the mixture. The top 2 inches of a seed bed should be screened through a ¼-inch mesh screen. The ingredients should be thoroughly mixed and, just before sowing, firmed down with a flat block of wood or similar implement.

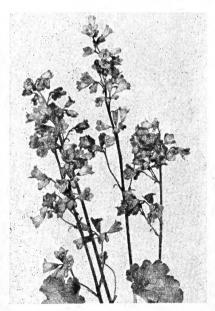


COSMOS SENSATION MIXED

CORAL BELLS Heuchera (p) Grp. 5

A low growing hardy perennial plant with heart shaped leaves, which form a low clump 6 to 8 inches high and bearing during summer, loose graceful sprays of red flowers in great profusion.

Spitfire. Large, rich scarlet. Pkt. 25c.



CORAL BELLS

COREOPSIS (p) Grp. 5

One of our most popular perennials; the attractive flowers are borne in great profusion and are excellent for cutting. Height, 3 feet.

Grandiflora Double Sunburst. Much of the beauty of early summer gardens is due to the brilliant golden yellow of Coreopsis plantings. The double flowers are large, 1½ to 2 inches across, deep golden yellow, and are excellent for cutting as well as for garden decoration. Fine keepers; plants are easy to grow. Pkt. 10c.

COSMOS (a) Grp. 3

No garden is complete without Cosmos. These old favorites supply a gorgeous, colorful effect during late summer and fall. Fine for cutting as the flowers last well in water.

Early Klondyke Orange Flare. The longstemmed flowers of bright vivid orange are freely borne on 2 to 3 foot plants. Its most remarkable feature, however, is its early blooming habit. It blooms from mid-summer until frost. Pkt. 10c.

SENSATION COSMOS

A superior type for cutting and all around use. Flowers 4 to 5 inches across on 3- to 4-foot plants.

 $egin{array}{ll} \textbf{Dazzler.} & \textbf{A} & \textbf{luscious} & \textbf{shade} & \textbf{of} & \textbf{velvety} \\ \textbf{crimson maroon.} & \textbf{Pkt. 15c.} \end{array}$

Pinky. A delightful rose-pink Pkt. 15c. Purity. Glistening white. Pkt. 15c.

Radiance. Winner of the highest award in the 48 All America trials, Radiance introduces two entirely new colors in Sensation Cosmos: Striking deep rose and rich crimson, in the first bicolor Cosmos ever to be developed. Pkt. 25c.

CYNOGLOSSUM (b) Grp. 2. Blue Chinese Forget-Me-Not

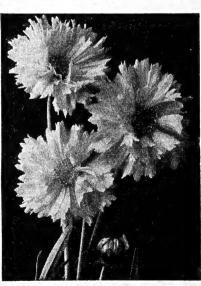
Firmament. A hardy biennial of the easiest culture, forming strong plants about 18 inches high and producing through the summer months sprays of Forget-Me-Not-like flowers. Will bloom the first season if sown early. Pkt. 10c.

DAHLIASFrom Seed (rp) Grp. 5

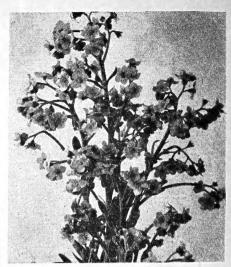
Improved Unwin's Dwarf Hybrids. These double and semi-double Dahlias are one of England's best contributions to the flower world. They grow from 18 inches to 2 feet tall and come in many delightful shades. Plants are compact and are as easy to grow as Zinnias. Bloom the whole summer.

Mixed colors. Pkt. 15c.

Coltness Hybrids. Dwarf Dahlias which grow but 12 to 18 inches tall. Masses of single flowers in many brilliant colors make beautiful borders; also very useful for cutting as the flowers are borne on stiff stems. Flowers from early July to frost and require little care. Mixed colors. Pkt. 15c.



COREOPSIS DOUBLE SUNBURST



CYNOGLOSSUM AMABILE

DAISIES AFRICAN GOLDEN DAISIES, Dimorphotheca (a)

The plants are of branching habit, growing about 15 inches high. An easily cultivated annual. Mixed. Pkt. 10c.

PAINTED DAISY, Pyrethrum (p) Grp. 5

This plant is cousin to the Chrysanthemum and Matricaria and should play an important part in many a well planted garden. Height, 1 to 3 feet.

garden. Height, 1 to 3 feet. Single Mixed. Radiating petals in many tones of rose and red about a golden center. Pkt. 15c.

SHASTA DAISY,

Chrysanthemum maximum (p) Grp. 5

Popular hardy perennial bearing large white blooms with handsome yellow centers. They are valuable for border decoration and especially pleasing in bouquets.



BRACHYCOME

SWAN RIVER DAISY Brachycome (a) Grp. 2

Brilliant free-flowering annual blooming throughout the summer and suitable for beds or borders. The dainty flowers resemble small Cinerarias. Height, 6 to 12 inches.

Mixed Colors. Pkt. 10c.

TRANSVAAL DAISY, Gerbera (p) Grp. 5

The large Marguerite-like flowers come in all shades of pink, salmon, red and yellow and are borne on long, stiff, straight stems. They require a warm, sunny position, good drainage and protection from frost. Single. Pkt. 25c.

DELPHINIUM (p) Grp. 5

Pacific Hybrids. A new strain of Delphiniums originated on the Pacific Coast to grow under Pacific Coast conditions. Huge flowers, 2½ to 3½ inches across, beautifully spaced on well balanced tall spikes. Highly resistant to mildew. Color range excellent and comes practically 100% double florets. Galahad, white; Summer Skies, light blue; Blue Bird; Guinevere, pink-lavender; Mixed, Pkt. 25c.

Chinensis, Cambridge Blue (a) Grp. 2. Branching heads of azure blue flowers. plants three feet high. Pkt. 15c.

FLOWERING TOBACCO Nicotiana (a) Grp. 4

Stately plants producing large, trumpet shaped blooms until frost. Fine for beds and borders. Height, 3 feet.

Affinis Hybrids, Mixed Colors. Pkt. 10c. Fragrant Red. Pkt. 10c.

Fragrant White. Pkt. 10c.

FOXGLOVE, Digitalis (b) Grp. 5

This ornamental hardy plant is used extensively for naturalizing in shrubbery borders and along the edges of woods. It grows well under almost any conditions, giving a wealth of bloom during June and July. Height, 4 to 6 feet. Shirley Mixed. Pkt. 10c.

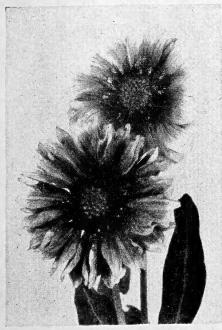
GAILLARDIA Blanket Flower (p) Grp. 5

Tones of orange, yellow, red, and maroon, often beautifully combined in a single blossom, make these flowering plants gay ornaments of the garden all summer. Height, 1 to 2 feet.

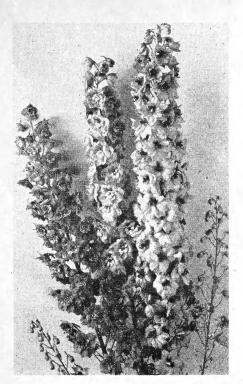
Grandiflora Portola Hybrids. (p) Semidouble blooms of magnificent size and broad overlapping petals, golden tipped around glowing centers of bronzy red. Pkt. 10c.

Dazzler. Large, well formed flowers, very vivid in the garden as the name implies. Golden yellow and maroon red. Striking perennial. Pkt. 10c.

Single Mixed. Daisy-like yellow and bronze, yellow center. Pkt. 10c.



GAILLARDIA



DELPHINIUM PACIFIC HYBRIDS

GERANIUM SEED (p) Grp. 5

A mixture of many lovely shades and types. Suitable for pot plants. Also excellent for the garden. Where frosts are encountered set plants, pot and all, in the garden for summer bloom. Pkt. 25c.

GEUM, Avens (p) Grp. 5

Beautiful hardy perennials, bearing profusely large, showy, double flowers all through the summer. An elegant flower for bouquets. Height, 18 inches.

Lady Stratheden. A new golden yellow with large full flowers of great beauty. Pkt. 15c.

Mrs. Bradshaw. Large, double, brilliant orange-scarlet. In flower throughout the entire summer. Pkt. 15c.

HEDDEWIGII See Pinks

HOLLYHOCK, Althaea (p) Grp. 5

The beautiful color effects produced by the planting of these flowers render them indispensable for the old-fashioned garden or the herbaceous border. Height, 6 to 12 feet

Indian Spring. (a) Semi-double annual flowers of bright rose and rosy carmine. Its many flowered branches produce a continuous show until frost. Sow fall or early spring. Flowers five months from seed. Pkt. 10c.

Triumph. Double Mixed. Tall, very vigorous plants with many large flowers well placed on long tall spikes. The very large flowers are loosely doubled, well ruffled and fringed petals making them particularly attractive. The colors range through all the beautiful shades with pinks and salmon predominating. Many are two-toned art shades. Pkt. 10c.

Chater's Double, (p) Deep rose, salmon rose, scarlet, sunflower yellow, and white. Separate colors. Pkt. 10c.

LUPIN, Sun Dials (p) Grp. 1

Russell Lupins. Long, closely set spikes of flowers in a great variety of rich colors—deep yellows, oranges, reds, and briliant bi-colors never seen in Lupins before. The florets are large with flat fanlike back-standards, and unlike all other Lupins, most of the spikes retain their florets throughout the whole period of development. Pkt. 25c.

LOBELIA (a) Gdp. 4

A dainty and continuous blooming annual of compact growth, remarkable for its profusion of beautiful blue flowers. Unexcelled for edging, ribbon beds, hanging baskets or window boxes. Height, about 6 inches.

Compacta, Cambridge Blue. A beautiful large flowered, light blue variety. Green foliage. Pkt. 10c.

Compacta, Crystal Palace. Erect and very free blooming. Best dark blue for edging. Fine for pots. Pkt. 10c.

Sapphire. A superb variety of pendulous habit; large deep blue flowers with conspicuous white eye. For hanging baskets and window boxes. Pkt. 10c.

GODETIA, Satinflower (a) Grp. 2

Very handsome annual plants, especially suited for semi-shady locations. Sow in spring in the open and thin to 8 or 10 inches apart. The flowers are bright and colorful and the single sorts are not unlike the Azalea in form.

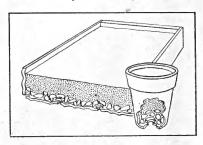
Tall Double. Long graceful spikes are decorated with double blossoms resembling satin pompons one above another. Height, 2 feet. Pkt. 10c.

LINARIA Miniature Snapdragon (a) Grp. 3

This interesting annual bears flowers which resemble miniature Snapdragons ending in single elongated spurs. It includes both trailing and erect growing varieties which are little known but worthy of greater attention. Height, 8 to 18 inches.

Fairy Bouquet. Small spikes of dainty, pastel flowers. Fragrant. Free-flowering and lovely in the border. Pkt. 10c.

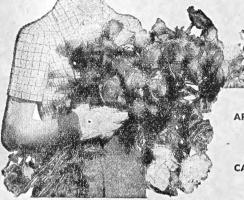
Drainage is Important



For growing seed indoors either pots or shallow boxes known as flats, are satisfactory. Wh chever you use be sure the drainage is good. In the case of flats see that the boards on the bottom are spaced about a quarter of an inch apart. When filling the seed flats place some material such as granulated peat moss along the cracks to prevent the soil from washing through the bottom. On the bottom half inch of the flat place gravel or soil screenings to help the drainage. If pots are used be sure to put some drainage material in the bottoms.

Protect your beautiful garden...

Check your needs for these ORTHO pest control products



TWO GREAT NEW PRODUCTS

BOTANO Deluxe

Improved: contains Zinc and Iron Carbamates, Gamma Isomer of Benzene Hexachloride, Dianysl Trichloroethane.

8-oz. Duster, 754 2-lb., \$1.50

VAPOTONE Spray

Kills Red Spider, Aphis—for Greenhouse use.

MULTI-PURPOSE SPRAY

ORTHO Garden Spray Set. For use against more prevalent Garden Insects.

ORTHO Garden Spray Set, JR. 2-oz. bottles of Extrax, Greenol, Volck...\$1.20

MULTI-PURPOSE DUST

BOIANO Garden Dust. For use against many insects and diseases. One of the safest multi-purpose dusts that can be used, 10-oz. size also serves as handy garden duster. Includes Rotenone and Pyrethrum.

MULTI-PURPOSE BAIT

PJG-GETA PELLETS. For use against Principal Foraging Pests.

Slugs, Snails, Cutworms, Earwigs, Grasshoppers, Strawberry Root Weevil. Baiting against these pests is easy with the new BUG-GETA PELLETS Compressed BATTS. 5000 baits in a 2-pound carton.

12-oz. Crtn, 35c; 2-lb. Crtn, 75c 5-lb. Crtn, \$1.50; 25-lb. Bag, \$5.60 APPO Cutworm Bait. A new poisoned Apple bait. Kills Cutworms, Strawberry RootWeevil; alsoVegetableWeevil, Slugs, Snails.....1-lb. Carton, 45¢

CALTOX Garden Dust "525". Especially useful on Tomatoes, Potatoes, Cucumbers, Squash and Melons. Contains Cryolite, Copper and Zinc. 10-oz. Dual Purpose Package.....60¢

VOLCK Oil Spray. Envelops, wets and smothers many sucking insects. Also spray carrier for other sprays.

4-oz. Bottle, 35¢ 1-Pint Bottle, 70¢
1-Gallon Can \$2.85

ORTHOL Garden Spray. (Garden VOLCK with DDT.) Kills Aphis, Thrips, Mealybugs and many other insects.
4-oz. Bottle, 35¢ 16-oz. Bottle, 75¢

ORTHO Sowbug Killer. A specially prepared bait for use against Sowbugs and Pillbugs.....1-lb. Can, 50¢

ORTHO Ant and Roach Powder. A Fluorine-Pyrethum Insecticide for use against Ants, Roaches, Silverfish. Easy to use.......... 4½-oz. Shaker, 25¢

ANT-B-GON Ant Poison. Four to eight Dispensers are enough for average home. Easy to refill. Ants feed from "Wick"... can't get inside. For Argentine and Sweets-eating ants.

Set of four 1-oz. Dispensers......70¢
Ant poison to refill dispensers:

4-oz. Bottle, 25¢ 1 Pint, 60¢

EXTRAX Insect Spray. Contains Rotenone and Pyrethrum. Kills by contact insects such as Aphis, Beetles, Caterpillars, Thrips.

THREE NEW DDT INSECTICIDES

PEST-B-GON Insect Spray. Contains 20% DDT. Kills Beetles, Worms, Thrips, Ants, Leafhoppers; also Houseflies (as screen paint), Mosquitoes, Fleas. 4-oz. Bottle, 65¢ 1 Pint, \$2.00

PEST-B-GON Insect Dust. Contains 10% DDT. Kills many Thrips, Plant Bugs, Beetles, Worms, Leafhoppers —Fleas, Bedbugs, Roaches, Silverfish, Ants.

10-oz. Duster Package.......69¢ 2-lb. Package\$1.00

PEST-B-GON Wettable. Wettable DDT Powder......1 lb., \$1.00

ORTHO Lead Arsenate. A stomach poison for use as a spray or dus. 1 lb., 50¢

FLOTOX Gorden Sulfur. Finely powdered.
Use as a dust or spray... 26 ozs., 35¢

contax Sealing Compound. Protect cuts and tree wounds. Also has many other uses............ Gallon Can, \$1.50

ORTHO Rose Spray Kit. Special Combination Offer. Contains 2-oz. bottle "EXTRAX" for Aphis and other insects and 2-oz. bottle "CREENOL" to prevent certain Powdery Mildews. Makes 12 gallons spray. Used for vegetables, too..... Each Kit, \$1.00

ORTHO Rose Dust. Complete rose and flower garden dust.

8 oz., \$1.00 1 lb., \$1.25

ORTHO Soil Fumigant. To control Cabbage and Onion Maggot, Sod Webworm.
4-oz. Bottle, 35¢ 1 Pint, \$1.00

friox. Poisons soil and prevents weeds from growing. Use on driveways, walks, and other places where no vegetation is wanted. 1-Qt. Can, \$1.00 1-Gal. Can, \$3.50

WEED-B-GON Weed Killer. Contains 2,4-D.
A hormone spray for killing Wild
Morning-Glory (Bindweed), Poison
Oak, Poison Ivy, Plaintain, Dandelion. Use on grass lawns (not
Dichondra, Lippia or Clover).
4-oz. Bottle, 50¢ 1 Pint, \$1.50

ORTHO Rat Bait Pellets. Ready-to-use Red Squill Baits. Poisoned Rats seek underground burrows before dying. 2-oz. Carton, 25¢ 6-oz. Carton, 45¢

scram Dog Repellent. A special powder used to keep dogs away from shrubs, flowers, lawns, store fronts, porches, etc. Easy to use. Does not harm animals.......8-cz. Shoker, 50¢

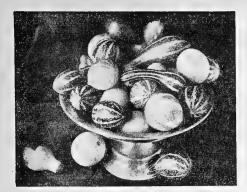
ORTHO-PET Flea Powder.

11/2- oz. Puffer Package 35c



CALIFORNIA SPRAY-CHEMICAL CORP.

Richmond, California Elizabeth, New Jersey



ORNAMENTAL GOURDS

ORNAMENTAL GOURDS

(ac) Grp. 3

Ornamental Gourds are easily grown in rich soil, where they will produce plenty of fruits. They may be trained on trellises and the ripened fruits used for ornaments. Special mixture of large and small kinds. Pkt. 10c.

LARKSPUR (a) Grp. 3

Annual Delph nium are adorned with finely cut, feathery foliage which sets off to advantage the handsome long floral spikes of double blossoms.

GIANT IMPERIAL. Tall, upright, compact, basal branching in hab.t, the Giant Imperials have replaced all other types of Larkspurs for general garden use. Their Delphinium-like spikes of double florets are carried on stout stems 4 to 5 feet.

Blue Bell. Delightful clear light blue. Upright with long base branching spikes. Pkt. 10c.

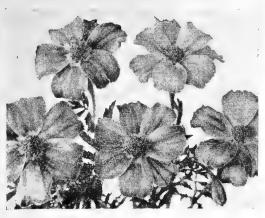
Blue Spire. Very deep violet blue. Outstanding color. Pkt. 10c.

Carmine King. Rich deep carmine and salmon flowers on long spikes; 3 to 4 ft. stems. Fkt. 10c.

Pink King. A lovely soft, yet vibrant shade of salmon rose. Fully double, two-inch florets of rounded broad petals which are evenly and closely spaced on stems. Basal branched character gives several fine spikes of bloom on each plant. One of the earliest flowering of all Larkspurs. Fkt. 10c.



LARKSPUR GIANT IMPERIAL



MARIGOLD FLASH

Pink Perfection. Two-inch florets of rounded broad petals evenly and closely spaced on stem, giving a heavy Hollyhock-like cutting spike 24 in. long. Very free flowering. Color is luscious, lively light pink. Ikt. 10c.

White King. Flowers pure, glistening white, with extremely large double florets, evenly spaced on stem. Early, the finest Larkspur. Pkt. 10c.
Finest Mixed. Pkt. 10c.

MARIGOLD (a) Grp. 2

AFRICAN TALL DOUBLE (Tagetes erecta). Very large globular flowers composed of compact tubular or quilled petals. The stems should be cut carefully to avoid the somewhat disagreeable odor when bruised. Height, 2½ feet.

All Double Orange. An improved strain which produces pract cally one hundred per cent double flowers. Fkt. 15c.

Lemon All Double. A fluffy fully doubled variety with pale yellow blooms loosely quilled. I kt. 15c.

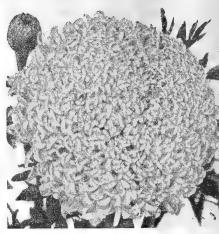
CARNATION FLOWERED, Guinea Gold (African). Carnation-like petals and unusually brilliant golden color makes this flower outstanding among Marigolds. It lacks much of the pungent odor of other Marigolds. The plant blooms very freely. Height, 2 feet. Fkt. 15c.

Gigantea, Fu'l Double Mixture. Flowers are largest ever known in Marigold. A mixture rang ng from deep orange through golden orange, deep golden yellow, light yellow, lemon yellow, and a delightful new shade of primrose, Pkt. 15e.

DWARF FRENCH, Double Harmony Hybrid. Without question one of the very finest Marigolds in roduced. Flowers charming and distinct. Scabiosa-like in formation with tubular deep orange center made flanked by broad velvety dark maroon-brown guard petals. Plants are dwarf, about 1 ft. high, compact, free blooming. Early and attractive for cutting. Fkt. 15c.

Dwarf French, Flash. (Silver Medal 1945 All-America selection.) Single. Truly named because it is one of the most striking plants in the garden. Vivid 1½ inch flowers range from red, through bronze to yellow. Compact plants are covered with blooms from early summer until frost. Pkt. 25c.

Scarlet Glow. Single. 10 inches tall. well covered with flowers 1% inches across, which vary interestingly from deep scarlet to tangerine yellow. Pkt. 15c.



MARIGOLD MISSION GIANT

MISSION GIANTS, Mixed. Honorable Mention, All America Selections, 1942. Large, two and a half inch flowers of bright, rich, clear yellow, on luxurious, large plants. Flowers are of double, incurved, Chrysanthemum-like form, and very attractive. Blooms late and lasts until frost. Un formly three to five feet tall. Mixed. I kt. 15c.

MINIATURE, Yellow Pygmy. Honorable Mention, All-America Selections, 1940. Light lemon yellow. Lilliput French double type, growing only 8 inches tall and compact. Flowers 1½ inches across, freely produced. Excellent for edging and potting. Fkt. 15c.

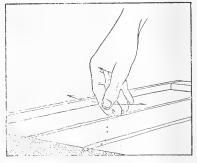
Miniature Spry. Extra dwarf. double French type: compact and uniform, so may be used for edging. About 9 inches tall, early blooming, with very light orange crested center and maroon outer petals. Profuse flowering. Ikt. 15c.

MIGNONETTE Reseda Odorata (a) Grp. 4

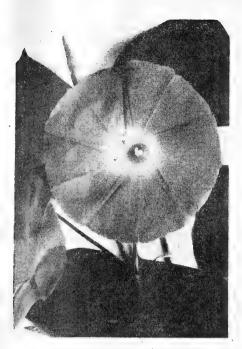
Th's old-fashioned flower still enjoys the greatest popularity. Grown for its sweet perfume, which is most pronounced when grown in a light sandy soil. Height, 6 to 10 inches.

Machet Mixed. Includes only large flower ng varieties of sweet scented Mignonette. Γkt. 10c.

Sowing the Seed



Mark the surface of the flat or seed bed by pressing a narrow edged ruler or garden label lightly into the surface. Sow the seed thinly in the depressions, either directly from the seed packets, or by sifting it out between your thumb and forefinger. The seed should be covered lightly. A fine meshed kitchen screen serves very well for this purpose. Place a handful of dry soil mixture in the screen and sieve onto the seed drill.



MORNING GLORY HEAVENLY BLUE

MORNING GLORY Ipomoea (ac) Grp. 1

Climbers of rapid growth, with beautiful and varied flowers, invaluable for covering walls, trellises, arbors. They are invaluable.

Heavenly Blue. A variety that is bringing new popularity to Morning Glories. It is an early blooming climber, literally covered with lovely flowers of sky-blue. Flowers $3\frac{1}{2}$ inches across and blooms until frost. Pkt. 15e.

Pearly Gates. Glistening white flowers are 4 inches or more across when fully open. The vigorous, rap d growing vines produce many flowers. Pkt. 25c.

Scarlett O'Hara. An entirely new color in the popular Morning Glories — rich dark wine red or deep rosy crimson. Flowers 4 inches in diameter, freely produced on fast growing vines. Very showy for covering a fence or trellis. The dark green foliage does not make a heavy growth, leaving plants graceful in appearance. Pkt. 15c.

Mixed Imperial. These are beyond question the handsomest of all Morning Glories. The flowers are of gigantic size. Pkt. 10c.



NEMESIA

NASTURTIUM (a) Grp. 1

GLORIOUS GLEAM HYBRIDS. Delightfully sweet scented; double. Color range includes brilliant blend of salmon, golden yellow, orange scarlet, cerise, cream, orange, maroon and crimson shades. Fkt. 15c.

Golden Gleam. Golden yellow, sweet scented. Pkt. 15c.

Scarlet Gleam. Fiery scarlet. Pkt. 15c. DWARF DOUBLE GEM MIXTURE. An evenly balanced range of colors on dwarf, compact gem-like plants. Ideal annual for forder and edging use. Plants are dwarf and compact, totally without runners. I kt. 25c.

DWARF OR BEDDING VARIETIES. Of dwarf, compact growth. Excellent for borders or for bedding, forming plants about 1 foot high by 1 foot across. Finest Mixed. Fkt. 15c.

TALL or CLIMBING NASTURTIUMS. For covering trellises, fences, arbors, trailing from vases, over rock-work, etc. nothing can equal their great quantities of bloom from early summer until frost. The seed pods can be grathered while green and tender for picking. Height, 8 to 10 feet. Finest Mixed. Pkt. 15c.



NASTURTIUM

NEMESIA (ra) Grp. 4

This plant is excellent for edging purposes. Plants send up many slender stalks crowned with fairy-like flowers, something like a Schizanthus. When the flowers fade they may be trimmed back and will bloom again. Their colors run from the brightest reds, yellows, oranges, to the brightest blues and purples. Compacta Triumph, Finest Mixed Colors. Pkt. 25c. Height 6 to 12 inches.

NEMOPHILA (a) Grp. 1

Small cup-shaped blossoms which are fine ground cover for bulb beds. Grows about 6 inches high.

Baby Blue Eyes (Insignis Blue). Sky blue with white eyes. Pkt. 10c.

NIEREMBERGIA See Blue Fern Flower

PANSY, Heart's Ease (b) Grp. 5

Swiss Giant. Within the last few years the blossoms of this strain have been remarkably improved in every way. The plants are compact in habit and produce immense flowers for a long blooming season. Attractive shades. Pkt. 50c.

Popular Bedding Mixture. These are the popular saucy-faced beauties that everybody loves, comprising the finest varieties in all colors. Pkt. 20c.

PETUNIA (a) Grp. 4

The seed may be started indoors early in the year in seed boxes and later transplanted or sown out of doors in the spring. Cover very lightly and apply water with a fine spray. Be careful not to discard the smaller and weaker seedlings. From these the finest flowers are often obtained, the coarse growing plants frequently reverting to the common types.

Ruffled Nana Compacta—Little Giants Mixed. These 8 to 10 inch plants remain so compact and erect all season that this new varicty is destined to become the most popular of all Petunias for the home garden. Ruffled deep-throated flowers of medium size continue to keep the plants completely covered all season. 3-inch blooms in unusual colors range from deep crimson to white in unique shades and markings. Pkt. 25c.

HYBRIDA NANA COMPACTA. 1 ft. A fine type of Petunia for small beds and borders; often used for pot culture. This Petunia keeps its dwarf stature very well throughout the blooming season.

Glowing Rose. A new Petunia with glowing rose flowers on well-rounded, mound-shaped plants. Starts to flower a month ahead of the nan compacta varieties and remains in bloom as long as the later kinds. Pkt. 25c.

Rosy Morn. Soft, rosy pink with white throat. Fkt. 10c.

Heavenly Blue (Silver Blue). Enchanting shade of light silvery blue. Dwarf. Pkt. 10c.

Snowball. Flowers pure white. Pkt. 35c.

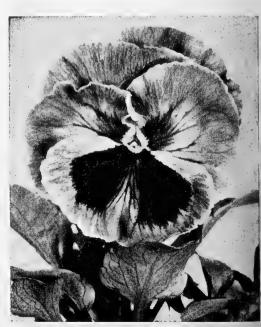
Velvet Ball. Deep mahogany red flowers, larger than others in this group. Pkt. 25c.
Mixed. Pkt. 10c.

PETUNIA GRANDIFLORA (Large Flowered)

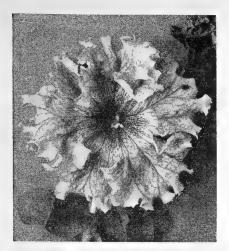
Dazzler. A new low-growing variety that maintains its uniform habit throughout the season. The color is a dazzling orange scarlet. Invaluable for borders and bedding. Pkt. 25c.

Elk's Pride. Very large, deep purple. Pkt. 25c.

Snowstorm Improved. Glistening white shading yellow in throat. Pkt. 25c.



PANSY SWISS GIANTS



PETUNIA GLAMOUR

PETUNIA LARGE FLOWERED FRINGED

Theodosia. Soft rosy pink with contrast ing golden yellow veined throat. An outstanding variety in this class. Pkt. 25c.

PETUNIA FRINGED AND RUFFLED Super Fluffy Ruffles. A new ruffled and frilled type of Petunia that has the appearance of being almost double. Flowers are very large with a deep throat. The mixture is well balanced with shades of pink and white, salmon, salmon pink. deep rose, rose, crimson, and light blue Pkt. 25c.

RUFFLED GIANTS OF CALIFORNIA Glamour. Honorable Mention, All-America Selections, 1942. Large flowers of salmon-rose with brown veining on white in the throat. An excellent color under artificial light and outdoors. Most flowers have wavy, fringed petals although a few come plain edged. Pkt. 50c.

Supreme Strain. A new strain of rose and pink shades. Light, richly-veined throats surrounded by satiny petals



PETUNIA ROSY MORN

which are heavily ruffled. Large blooms, 5 to 7 inches in diameter, produced on strong, richly-foliaged plants. Excellent bedding variety; fine window box type. Pkt. 25c.

DWARF GIANTS OF CALIFORNIA

A dwarf sturdy growing type especially suited to pot culture. Flowers are beautifully ruffled and fringed with open well marked throats.

Ramona Strain. Dark and light shades mixed. Pkt. 25c.

PINKS (a) Grp. 2 (DIANTHUS)

Plant in full sun in any good garden soil. Sow in spring when danger of frost is past.

Heddewigii (Double). 10 inches. Very desirable pink in many color combinations for rock garden or borders. Pkt. 10c.

Heddiwigi Gaiety. The best annual garden pink. Pkt. 25c.

Dianthus Plumarius (Clove Pinks). Perennial. Double. Pkt. 10c.

Dianthus — Sweet Wivelsfield. Single mixed. Pkt. 10c.

FOR YOUR ROCK GARDEN

ROCK GARDEN PERENNIALS Mixed

A mixture of over 50 rare rock garden perennials with a maximum height of six inches. Some of the items will bloom almost as soon as the frost is out of the ground. Others will bloom later in the year, insuring the grower blooms all season. A planting, carefully made in a suitable place, should remain a beauty spot for a number of years without reseeding if given minimum care. Pkt. 50c.



DIANTHUS, Perennial Rock Garden Mixture

Twenty varieties of unusual species of dwarf perennials. When well grown, many plants will produce such an abundance of blooms that daily cutting of flowers will not decrease the loveliness of the plant. With an occasional replanting should last several years. Pkt. 50c

ROCK GARDEN ANNUALS Mixed

This mixture of over 30 varieties, not exceeding 12 inches in height, will provide blooms through the entire season. Planted as early as possible, the gardener should have blooms by the end of May. A succession of blooms will follow until late fall when frost will destroy the flowers. A second lot of blooms may be enjoyed on most plants if they are cut back to two inches of the crown and properly watered.

Pkt. 25c



PHLOX GIGANTEA

PHLOX DRUMMONDI (a) Grp. 2

Gigantea, Rosy Morn. Bronze Medal, All-America Selections, 1941. An extremely refreshing, gay and bright color combination of rose pink with a white eye. A color that will not fade in the strong sun. This new variety possesses the large sized blooms, the free flowering quality and the fine habit of both Gigantea Brilliant Mixed and Gigantea Salmon Glory. Pkt. 25c.

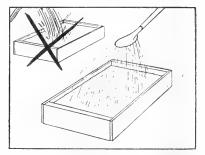
Gigantea, Salmon Glory. Silver Medal, All-America Selections, 1939. A good salmon in Phlox Drummondi Gigantea type. The individual florets are gigantic for Phlox, measuring from 1½ to 1½ inches in diameter. Color a pure salmon pink with a distinct creamy-white eye. One of the most beautiful color combinations ever seen. Pkt. 10c.

Gigantea Brilliant Mixed. Pkt. 15c.

PIN CUSHION FLOWER

(See Scabiosa)

Water - But Gently



Water the seed bed thoroughly, but gently with a fine spray. A coarse spray or stream of water will wash the seed out of the soil. For this reason, when using an outdoor seed bed, it is well to have a cover available to place over the seed bed during rainy spells. This should be supported several inches over the seed bed to allow free circulation of air.

Be sure to keep the seed bed moist. Excessive dryness will prevent germination.



KEEPWAY

KEEPWAY TARRED PLANT PROTECTORS Non-Poisonous

Protection from root maggot on Cabbage, Cauliflower, Broccoli, Brussells Sprouts, etc. Apply when setting out. Rains or cultivation do not destroy effectiveness. Protection until plant ma-

turity. Directions on packages. 24--15c, 72-35c, 500-\$1.50, 1000-\$2.60

KEEPWAY CUTWORM PLANT COLLARS Non-Poisonous

Protection from cutworms on Tomatoes, Cabbage Family, Peppers, Egg Plant and many varieties of flowers. Apply when setting out. Rains or cultivation do not destroy effectiveness. Protection until plant maturity. Can also be used as a plant band when

starting seed indoors. Directions on packages. 24-20c, 48-35c, 1000-\$4.50



ingredients create swift-acting gases. 24-oz. can

CONTROLS MOLES AND

OTHER BURROWING ANIMALS

Safe, easy-to-use product for effective eradication of lawn, garden and field pests. Simple directions on label explain

quick method of treatment. 100% active

6-lb. can

60¢

\$1.70

ZEHRUNG CHEMICAL CO. Portland 9, Oregon



Patented paper hothouses-completely protect plants from destructive Frosts, Storms, Insects. Ripen crops 3 weeks

earlier; increase yield 18% to 51%; maintain perfect Mulch. Big Garden Pkg. of 25 - only 60c. Setter Free.

otkaps

GERMAIN'S, Germaco Products Div., Los Angeles 21



New Handy Plant Tie

A Twist of the Wrist and Plant is Tied

Strong, dark green "invisible" tapes with wire reinforcing. TWIST-EMS' protect stems, permanently support annuals, perennials, vines, shrubs, vegetables.

250, 4-inch size...40c. Box of 125, 8-inch size...40c. Box of 125, 16-inch size...75c.

STWIST-EMS

Kill those here-and-there weeds by shaking Weedust directly from the ready-to-use can. For smaller lawns, for scattered weeds, for jobs that don't require a sprayer, Weedust in dry powder form is the ideal 2.4D weed-killer. 12 Oz. Sifter Can 75c.



🥯 Secret of bigger, better potted plants, garden flowers, vegetables!

Feed PLANTABBS to everything growing in your house and garden. If you don't get lovelier plants and a greater yield of finer-flavored vegetables, you get your money back. PLANTABBS are convenient, clean, odorless, highly concentrated PLANT FOOD TABLETS which help produce sturdy stems, luxuriant leaves, strong roots, gorgeous blooms, perfect form and color.

Box of 10 tablets 10c; 30 tablets 25c; 75 tablets 50c; 200 tablets \$1; 1000 tablets \$3.50.



POPPIES, Papaver

Poppies have long been favorite garden flowers for their delicacy, as well as the simplicity of the buds and neatness of the foliage. The pure colors and fine texture of the petals make a good showing in the garden. All are easily raised from seed which should be sown where the plants are to remain, later thinning to 8 or 12 inches between plants. In the North, sow in the open ground as early as possible in the spring; in California, sow from October to March.

Oriental Poppies (p) Grp. 5. Hardy plants with numerous leafy stems about 2½ feet bearing large showy flowers with a conspicuous black blotch on each petal. Mixed. Pkt. 25c.

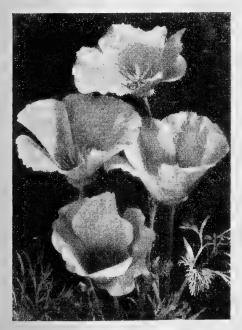
SHIRLEY (a) Grp. 1. Most charming Poppy for the garden. The plants, with their deeply cut foliage. slender, hairy stems and silky petaled blossoms, often fluted, present a gay, airy picture. Height, 18 inches. Fkt. 10c.

Sweet Brier (Double Annual Shirley). Full, double begonia-like flowers of a beautiful deep rose pink. One of the finest strains of double Shirleys for the garden. Pkt. 10c.

All Double Mixed. Mixture of the best colors. Full double and semi-double flowers in a great variety of colors. Pkt. 10c.

ICELAND FOPPY (p) Grp. 5. (Nudicaule). A hardy Poppy slightly resembling Shirley. Different in habit and contains many shades of yellow and orange. Height, 18 inches.

Kelmscott Strain. A superb mixture. All colors. Pkt. 25c.



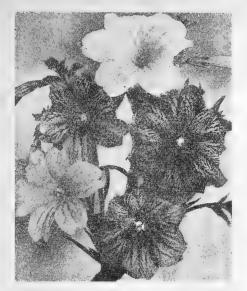
CALIFORNIA POPPY

CALIFORNIA POPPY Eschscholtzia (a) Grp. 1

Grandiflora Hybrids. Large flowering varieties in the most exquisite shades of gold, copper, bronze, scarlet, purple and crimson. Mixed Colors. Pkt. 10c.

Ramona Hybrids. A new strain containing many lovely shades. The plants grow compact and upright, with flowers beautifully frilled. Mixed Colors. Pkt. 100

Aurantiaca, Orange. The ordinary California Poppy. Pkt. 10c.



SALPIGLOSSIS

PORTULACA Moss Rose (ra) Grp. 1

Brilliant hardy annual of easy culture; excellent for massing in beds, edging or rock work, thriving best in a light, sandy soil and a sunny situation. Flowers of the brightest colors. Height, 6 to 10 inches.

Double Mixed. Pkt. 10c. Single Mixed. Pkt. 10c.

RED HOT POKER Tritoma (p) Grp. 5

A perennial, not strictly hardy, but will live through the severe winters with a protective covering of leaves or manure; or the roots may be lifted and carried over winter in sand in a cellar. Height, 4 to 6 feet. It harbors gladiolus thrips.

Mixed Hybrids. Pkt. 10c.

SATINFLOWER See Godetia

SALPIGLOSSIS Painted Tongue (a) Grp. 2

For delicate grace, richness of coloring, and velvety texture, the regal salpiglossis has practically no equal. From a low base of leaves rise slender wiry stalks which bear on more large Lily-like flowers in a magnificent range of colors. Height, 1 to 2½ feet.

Superb Mixed. Fkt. 10c.

POT MARIGOLD See Calendula

SALVIA, FLOWERING SAGE

Scarlet sage is usually treated as an annual. Start the seed from January to May, and set out plants when weather becomes warm. Perennial in mild climates.

Bonfire Grp 4. The crimson spikes grow erect above the foliage, forming handsome globular bushes. Fkt. 15c.

Zurich Grp. 4. Dwarf and compact in growth, forming oval bushes 15 to 18 inches high, thickly studded with fine spikes of scarlet flowers. Pkt. 25c.

SCHIZANTHUS See Butterfly Flower

How to Raise Our Flower Seeds

We have grouped our seeds according to the culture they require. Find the group number in the alphabetical listing, for example. Ageratum, Grp. 2, and your cultural instructions in the column below.

Group difficult to transplant.

Sow the seed where the plants are to flower, after the danger of frost has passed. Thin out to the desired distance when the seedlings are well started.

Group Seeds in this group are easily raised outside after the danger of frost has passed. Either sow them in their permanent positions or in a seed bed and transplant to the place where they are to flower.

Group Seeds in this group can be sown outside very early in the season, being very hardy. When the seedlings are big they should be transplanted to their permanent positions.

Group Sow seeds in flats in early spring for best results. When seedlings are large enough to handle transplant to other flats. Harden off gradually and plant into beds when the weather is settled.

Group of the perennial seeds.

They can either be sown indoors in flats or outside. If sown outside it is good practice to sow them in mid-spring so they will reach a fair size before the hot weather starts. After the seedlings are big enough to handle, transplant to allow room for growth. Plant in their permanent places in fall or, if the plants are very small, winter over in a cold frame and plant out the following spring.

For best results with biennials such as Sweet Williams, Canterbury Bells, Wallflowers and Beauty of Nice Stocks, sow them in summer. When the seedlings are large enough transplant or thin them so they will make sturdy plants by fall. At that time plant them where they are to flower. Handled in this way, these flowers will give a really good display.

Try interplanting some of these showy biennial flowers with your late-flowering Tulips for very pleasing effects.

SCABIOSA

Pin Cushion Flower (a) Grp. 2

Rosette. A beautiful Scabiosa of deep rose suffused with salmon. A "must have". Fkt. 15c.

Salmon Beauty. Pure salmon with huge flowers. Vigorous. The stems are long and stiff, making it a most popular flower for garden or cutting. Pkt. 15c.

Imperial Giants, Blue Moon. An entirely different and improved flower and plant from the existing Scabiosa varieties. Fully double, extremely large and deep. Petals broad and wavy, entirely eliminating the p.ncushion center; rich deep lavender blue. Tall growing and very upright with long, wiry, heavy, stems in which the weak neck of the older types is completely eliminated. Ideal for cutting. Pkt. 15c.

Shasta. Pure white, very large flowers. Pkt. 15c.

Giant Hybrids. Mixed. Pkt. 10c.

HARDY PERENNIAL VARIETIES

Caucasica (p) Grp. 5. Giant Hybrids (Isaac House Strain). Fringed and ruffled, shades of blue from lavender to dark blue; very large flowers. Pkt. 15c.



SNAPDRAGON

SNAPDRAGON Antirrhinum (a) Grp. 4

SUPER GIANTS, RUST RESISTANT Campfire. Luminous scarlet. Pkt. 25c. Copper Queen. Bronzy copper. Pkt. 25c. Crimson. Fiery crimson. Pkt. 25c.

Paradise Rose, Rose pink. Pkt. 25c.

Rosalie. Rich deep rose with underlying tone of topaz or amber. The plants are base branching and produce from 6 to 8 huge long flowering spikes on which the florets are decidedly well arranged. An all-purpose Snapdragon. Pkt. 25c.

Cherry Rose. Bright cherry rose flowers of startling brilliance on 3-foot plants of uniform habit of growth make this Snapdragon highly desirable. Pkt. 25c.

Yellow Giant. Deep yellow. Pkt. 25c. Finest Mixed. Pkt. 15c.

Tetra. Largest flowered of all snapdragons, many individual flowers are ruffled. Seed comes in a superfine mixture including all the best snapdragon shades: orange, yellow, peach, canary, bronze, orchid, crimson, scarlet, pink, white. Main spike 2½ feet tall with many laterals. Excellent for cutting. IPkt. 25c.

SWEET PEAS

CHOICE MIXTURE SPENCER SWEET PEAS

Pkt. 10c; oz. 50c.

ALL COLORS: Pkt. 15c; oz. 75c. PINK AND ROSE SHADES

Rose Pink. Silver Medal, All-America Selections, 1940. Large, wavy, rose-pink flowers on white ground. New type, maturing between the early flowering and the Spencer classes. Is taller and has longer stems than either of the others. Patricia Unwin. Salmon pink on a cream ground.

Pinkie. Rose-pink with large and frilled flowers. This variety is seldom affected by weather conditions and first-class Blooms can be cut all during its long blossoming period.

Jack Hobbs. Cream-pink, flushed scarlet. One of the largest Sweet Peas ever introduced.

Miss California. The color is a beautiful shade of rich pink, deeply flushed and shaded with salmon. Unsurpassed for either exhibition or cutting purposes.

LAVENDER AND BLUE SHADES

Ambition. Rich deep lavender, with a darker shade on the base of the standard and wings, lessening as the bloom ages. Gold Medal and Award of Merit.

Flagship. Deep navy blue.

Reflection. A beautiful shade of clear blue.

WHITE AND CREAM SHADES

Gigantic. An enormous white frilled flower of exquisite texture and artistic form. Black seeded.

Cream Gigantic. Large ruffled flowers of perfect form, free from pink or blush tinge. Black seeded.

ORANGE AND SALMON SHADES

Pirate Gold. Golden orange.

Smiles. Clear glistening salmon best describes this exquistie variety. The large flowers are beautifully waved and fluted.

CERISE SHADES

Mrs. A. Searles. Salmon-cerise, merging into a soft oriental red. A remarkable and distinct color.

Artiste. Clear Geranium pink; a rare color. Flowers are large and quite frilled. An outstanding Sweet Pea.

RED SHADES

Red Supreme. Deep crimson; an abundance of flowers on long stems.

Welcome. By far the best and most brilliant, dazzling, scarlet Sweet Pea. For exhibition or gardens it is supreme. Absolutely sunproof.



SPENCER SWEET PEAS

MAROON AND PURPLE SHADES

Warrior. Rich chocolate maroon. A magnificent variety which has held its place and popularity for a number of years.

Olympia. Deep rich purple of graceful form and immense size.

RUFFLED VARIETIES

All Colors. Pkt. 15c; oz. 75c. Bonnie Ruffles. A beautiful salmon-pink.

Blue. Soft mid blue shade.

Crimson. Rich satiny crimson, ruffled and waved. Long stems.

Exquisite Ruffled. Sparkling salmoncerise; large ruffled.

Rose. Soft rich rose, large and ruffled.

White. Pure white.

Ruffled Mixed.

STOCKS, Gilliflower (a) Grp. 4

These popular flowers are easily grown, are so highly fragrant, and of such great beauty that they deserve a place in every garden. The Early Giant Imperial class are half-hardy annuals. Stocks are biennials, but if sown in early spring will bloom the same year. They are also valuable for winter forcing. In California Stocks are popular winter annuals.

Double Large Flowering Dwarf Ten Weeks, A wonderful strain for bedding. Pkt. 15c.

Beauty of Nice. It follows the Ten Weeks class in season of bloom. The plants are pyramidal in shape, branching above the base. Excellent for bedding and cutting. Height, 16 inches.

Finest Mixed Colors. Pkt. 15c.

GIANT IMPERIAL. Long stems and imposing spikes of large flowers make this the outstanding variety. It is about as early as Beauty of Nice and resembles it in hab t, except that the plant is less spreading and taller. Height, 2 feet.

Yellow (Buttercup). Pkt. 25c.

Blood Red. Fkt. 25c.

Rose. Fkt. 25c.

Lavender. Pkt. 25c.

White. Pkt. 25c.

Finest Mixed Colors. Pkt. 15c.

EVENING SCENTED STOCKS

The flowers are small, mauve colored, similar to the Virginian Stocks'but are delightfully fragrant toward evening. They are especially sweet after a rain. Matthiola Bicornis (p) Grp. 5. Pkt. 10c.

GIANT WAVED SWEET PEAS CHOICE SPENCER MIXED

This mixture is grown from a special formula which has been built up and perfected during many years. It contains over forty of the very best standard varieties of the most recent introductions, all waved and giant flowering. Pkt. 15c.

CULTURE OF SWEET PEAS

Sweet Peas are deep rooting and heavy feeding plants. We recommend a trench to be dug about 18 inches deep and 18 inches wide. In the bottom fork in about 6 inches of well-rotted manure. Fill in with soil in which is mixed a liberal quantity of well-rotted manure.

The actual sowing is done in a shallow trench 6 to 8 inches deep. Cover the seeds with 2 inches of soil and press firmly. The balance is filled in as the plants grow, thus establishing deeper roots than would otherwise be possible. Use one ounce of seed to 20 feet of the row and later thin out so that the plants will be 4 to 5 inches apart.

If flowers are kept picked and seed prevented from forming more and better bloom will be produced. Avoid overhead watering as it causes the flower buds to drop.

Time of Sowing: Spencer varieties may be sown in early October and lightly mulched in winter. Fall sowing gives finer flowers and longer stems and a slightly longer period of bloom.

In California, Early Flowering varieties are sown about August 1 and throughout the winter months. If sown in August they will bloom by November. Keep the surface of the bed cool by using a light mulch.

STRAWFLOWER or IMMORTELLE

HELICHRYSUM (a) Grp. 2. The finest of all Everlastings. They make unusually fine winter bouquets if cut when partially opened and dried slowly in a dry place, heads downward to keep the long stems straight. The centers of the double pompon-like flowers are nearly covered by the stiff overlapping petals. A wide range of brilliant and soft colors. Height, 2 to 3 feet. Finest Mixed. Pkt.

SUNFLOWER Helianthus (a) Grp. 2

Sun Gold. New. Large double flowers of brilliant golden yellow Free flowering. Pkt. 10c.

Red Sunflower. Tall single flowered variety with bright red blossoms. Pkt. 10c.

SWEET SULTAN

Centaurea (a) Grp. 2

These beautiful long stemmed flowers with their soft velvety heads make very enchanting bouquets. They measure 2 to 2½ inches across while the entire plant stands about 2½ to 3 feet tall. You can grow them readily in any garden soil, and your friends are sure to admire them. Mixed. Pkt. 10c.

SWEET WILLIAM Dianthus Barbatus (b) Grp. 5

A well known, attractive, free-flowering hardy biennial, producing a splendid effect in beds and borders with their rich and varied flowers. Height, 10 to 20 largests.

Single Varieties. Mixed. Pkt. 15c. Double Varieties. Mixed. Pt. 25c.

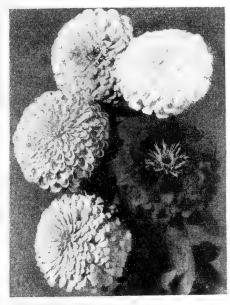
WALLFLOWER Cheiranthus (Grp.5)

English Wallflower (p) Spring blooming low erect perennial, in appearance much like stocks but flowers include yellow, yellow-brown, red and almost black. Sweetly fragrant. In mild climates plant in fall for early spring bloom and where winters are severe they should be carried over in a frame and set out early in spring. May be sown early in March for bloom the first year but the former method gives better flowering plants. Pkt. 15c.

Siberian Wallflower (Cheiranthus Alloni) (b). This unusual little plant deserves a place in your rock garden or low border. Upright spikes bear numerous fourpetaled flowers of dazzling rich orange. Flowers the first season from seed and when established will bloom all summer. Height, 1 foot. Single. Pkt. 15c.

ZINNIA (a) Grp. 1

One of the most showy and satisfactory of our hardy annuals for beds, mixed borders and for cutting purposes. Easy to grow in any good garden soil. They commence flowering early in summer and continue until frost.



ZINNIA CALIFORNIA GIANTS

SUPER CROWN OF GOLD, Pastel Tints. The finest large-flowered Zinnia, with large well formed flowers. Contains a wide range of pastel shades, including soft yellow, old gold, light pink, various shades of salmon, peach, and buff, cerise salmon, white, and cream, each petal overlaid at the base with deep golden yellow. Flowers are borne profusely throughout the season on strong, robust plants. Mixed shades. Pkt. 15c.

pouble dahlia flowered. 2½ feet. Enormous double flowers are produced on robust branching plants. The flowers usually have slightly hollowed center ringed with small tubular florets. Crisp, fresh appearance.

Dream. Deep rosy lavender. Pkt. 15c. Exquisite. Light rose, deep rose centers. Pkt. 15c.

Golden Dawn. Golden yellow. Pkt. 15c. Illumination. Deep self rose. Pkt. 15c. Oriole, Orange and gold bicolor. Pkt. 15c.

Polar Bear. White. Pkt. 15c.

Scarlet Flame. Bright scarlet. Pkt. 15c. Will Rogers. Brilliant scarlet. Pkt. 15c. Mixed. Pkt. 10c.

RED RIDING HOOD. 1 ft. of compact form covered the entire season with double scarlet flowers not over an inch across. Effective in borders. Pkt. 15c.

CALIFORNIA GIANTS. This variety is taller than the Dahlia flowered type, 3 to 4 feet high, with long stems which make the flowers fine for bouquets. The blooms are large, flat and very graceful. Finest Mixed Shades. Pkt. 15c.

FANTASY. A new Zinnia type. Shaggy. medium sized flowers. Plant 2½ to 3 ft. high. Free blooming. Excellent cutting.

Wildfire. A rich, dazzling scarlet. Wildfire adds a distinct note of color and cheerfulness to the garden and will enliven any home when used in flower arrangements. Plants neat in habit, strong growing, and very free blooming, 2½ to 3 feet in height; coming into flower 45 to 6 days after seed is sown. Pkt. 15c.

DOUBLE LILLIPUT. 12 inches. A charming dwarf which is excellent for low borders or edgings. The plants are of tidy habit and produce a bounteous supply of very double pompon flowers about 1½ inches across. The colors are bright. Mixed. Pkt. 15c.

LINEARIS. This little dwarf variety of Zinnia is most unusual and interesting. The flowers are single and of a lovely shade of golden orange, with a del.cate lemon yellow stripe through each petal. Blooms are produced in great profusion. Height, 8 to 10 inches. Pkt. 15c.

VERBENA (a) Grp. 4

One of the most popular garden annuals for beds and massing and for a gorgeous display during the summer months. Cannot be excelled, commencing to flower in July and continuing until frost. Height, 6 to 8 inches.

Floradale Beauty. A giant hybrid, the flowers varying from bright rose-pink to deep rose-red of exceptional brightness. Individual florets of perfect form, fully rounded, and average 1¼ inches across; heads 4 to 5 inches across. Pkt. 25c.

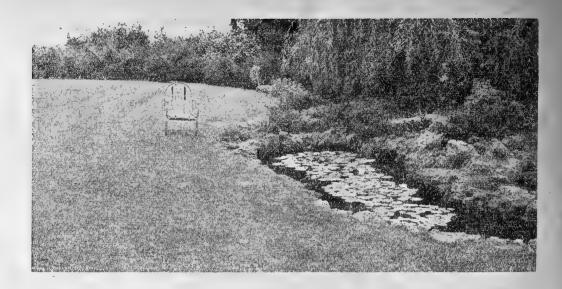
Hybrid Grandiflora Giant. Mixed. Very large flowers in lavender, white, pink and rose-red. Pkt. 15c.

VIOLA, Tufted Pansies (a) Grp. 4 Waller Franklin Formula Mixture. This blend of bright gay colors far surpasses any mixture of Violas we have seen. Bright shades of self colors of red, yellow, blue, and apricot combined with many shades which are blotched, undoubtedly make these Violas a supremenixture. Pkt. 25c.



ZINNIA FANTASY MIXED

Lawn Seed



ZENNER'S BENT LAWN MIXTURE

The Best All-Purpose Lawn Grass Seed. Price, 1 lb. \$1.25

A wonderful mixture that is the result of years of experimenting. It is especially prepared by us from the highest quality seeds that can be produced. It makes a smooth, green, velvety lawn with a thick bottom, free from common grasses which are inclined to produce clumps or knots. Only the very finest varieties of the most suitable grasses for making an even, thick turf are used in this mixture. The various grasses composing this well-balanced blend are fine-bladed and deep rooting, sure to produce the best results under average conditions of soil and climate. It is all plump, heavy seed free from chaff or weed seeds. Sow 1 pound for a plot 10 by 20 ft. (200 sq. ft.); 100 to 150 lbs. of seed are required to sow one acre.

Ask for Prices on Other Lawn Seeds

Astoria Bent. This strain of Bent differs from the Seaside variety in that it does not send out stolons, but spreads underground, sending up many root stalks that produce a splendid turf. The growth is upright, of fine texture and is a richer green than Seaside Bent. It is more practical for lawns and succeeds best in heavy soils. Sow 1 pound to 200 square feet.

Seaside Creeping Bent. Coos County strain, is the true creeping bent. The plant is dwarf and it multiplies rapidly by sending out runners in all directions; from these, new plants are produced, which in turn grow more runners. The turf becomes matted, and if damaged it heals over promptly. Sow 1 pound to 200 square feet.

Chewings Fescue. Used extensively on putting greens, fairways and tees on golf courses, and does well on any kind of soil. It also produces a stiff, upright plant. Sow 1 pound to 150 square feet.

Creeping or Red Fescue. Fine, round bladed grass, excellent for lawns. Slightly reddish at base. Fine for shade. Hardy.

Kentucky Blue Grass, Makes an excellent lawn of a dark green color. It forms a fine mat, and with care and water makes one of the best lawns. Sow 1 pound to 200 square feet.

Mo'stland or Meadow Foxtail. A rugged grass, ideal for mo st, low lying ground where other grasses will not do well. Sow 1 pound to 175 square feet.

Red Top. A fine-bladed grass that succeeds on almost any soil, although it does best under moist conditions. It is used in almost all lawn mixtures. Should not be planted by itself unless specifical ly recommended. Sow 1 pound to 200 square feet.

Rye Grass. A rapid growing grass where quick results are required. It is coarser than Kentucky Blue Grass and thrives in poor soil, It is used as a "nurse" crop in mixture to keep the lawn green while the better, slow-growing varieties are becoming established. Sow 1 pound to 150 square feet.

Two Little Thoughts-But a Big Difference . . .

Grass is food for many creatures but what about food for the grass? We have it and can tell you all about its use. Good lawn fertilizer is a specialty of ours. See our fertilizer section on page 18. What would a lawn be without weeds? If you'd really like to know try one of the new weed killers that now make weedless lawns easily possible.

HOW MUCH SEED?

You can figure how much lawn seed you need from the table below, which is compiled on the basis of 1 pound of seed for 175 square feet of lawn.

	Area in sq. ft.				os. seed quired

1875 2500					
3750		50x	75		22
5000 5625					
		75x1	001		42
10000		100X	100		90

Shady B'ue Grass (Poa trivialis). An ideal perennial grass for shady spots which is closely related to Kentucky Blue Grass, but somewhat finer and softer in texture. It is a creeper with an apple-green color. Requires plenty of water. Sow 1 pound to 200 square feet.

Shady Lawn Mixture. This grass is especially adapted for growing in very shady places or near buildings where other grasses will not grow. If you have a shady, barren place, try our Shady Lawn Mixture. Sow 1 pound to 200 square feet.

White Dwarf Clover. Very low growing sort, principally used in poor ground to g ve a green cover. Many like it in lawns, especially where grass does not do well. Sow 1 pound to 300 square feet.

How to Have A Good Lawn

A well made lawn will last a long time, so it pays to be thorough in preparing the soil.

Drainage is the first consideration. Water logged soil will not support a good turf. Tiling is one way to promote good dra.nage; another is to work liberal quantities of sand and gravel into the subsoil.



Topsoil is important. In many gardens the site for the lawn is covered to a considerable depth with subsoil from the basement excavation. If you cannot prevent this the next best thing to do is to have the lawn site covered with a 6-inch layer of good loam. Into this top layer of l.ve soil work garden compost, peat moss and commercial fertilizer.

At this point it is a good idea to rake the ground roughly and water it well to bring up the weeds. When they come up chop them off. Repeat the watering and hoeing until the weeds have been considerably reduced in numbers.

Roll the ground before seeding, to prevent it from settling unevenly, and then rake the surface lightly. Sow the seed so as to cover the ground thoroughly, and then cover it lightly with soil. Roll again so as to press the seed in firmly. If you have no roller, use boards and tramp on them so as to pack the ground firmly, but a roller is preferred.

Grass seed will germinate in from 8 to 15 days, according to the weather. If a lawn is made during the summer, the ground should be covered lightly with peat after the seed has been rolled, so as to retain the moisture. New lawns should not be allowed to dry out, not even for a half day. For the first 15 days the lawn should be watered twice a day if necessary. A lawn should be fertilized after the first cutting, and at least twice a year. Water well after applying.

WARNING: Do not use the so called rotted manure which is being sold to inexperienced gardeners. It may be full of wild clover and other weed seeds and pests. It is expensive when you take into consideration that a few pounds of good fertilizer is equal to a sack of manure. If you want a moisture-holding material for top-dressing use peat. We recommend the use of peat.

Important Ordering Suggestions

Free Transportation on All Flowers and Vegetable Seeds in Packets, Ounces or ¼ Pounds.

All seeds quoted in this catalog are shipped by Parcel Post, all transportation and packing charges are paid by us. C.O.D. and money order return fees are not considered as transportation charges and, therefore, must be paid for by the customer. Avoid them by sending remittance with order. Bulk seeds, such as Peas, Beans and Corn, in quantities, are shipped to your nearest express or freight office, transportation collect. If you wish them shipped by Parcel Post, please send necessary postage.

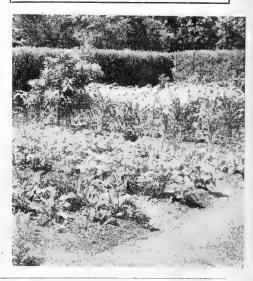
SHIPPING ORDERS. When goods are to be shipped by Freight or Express, give plain shipping directions; otherwise we use our best judgment in routing. Goods on which we pay transportation are shipped at our option.

SEND MONEY. Remittances should always accompany the order. Remittances may be made at our risk by any of the following methods (1st and best) Post Office Order; (2nd) Bank Draft; (3rd) Express Company Money Order; (4th) Cash by Express in amounts not less than \$50; (5th) Registered Letters.

WE GUARANTEE the safe arrival of your order.

Did you ever try a Cover Crop?

Some portions of your vegetable garden will probably be unused during part of the year. It's a good idea to sow a quick growing covercrop such as a combination of winter oats and vetch, or winter oats and rye, in these idle spaces. When planting time arrives turn your cover crop under to obtain the benef.ts of the humus and plant food stored in the green plants. If you have never tried cover cropping you'll be surprised at the results. Even stiff clay soils are noticeably improved by the use of a cover crop.



FERTILIZERS

ALL SOLD AT CURRENT MARKET PRICES. ASK FOR QUOTATIONS.

Ammonium Sulphate is a valuable fertilizer for all plants in which a large leaf development or rapid growth is desired. It will stimulate growth almost immediately. It is also used for top-dressing lawns, producing a thick velvet growth and discouraging the weeds. It is a highly concentrated nitrogenous product, containing 251/4 per cent ammonia, 201/4 per cent nitrogen. One pound to 200 square feet is sufficient application for lawns.

Bone Meal. Extra fine; is a fertilizer recommended for lawns, rose bushes, grape vines, especially where a moderately slow fertilizer is needed for the deep-rooted shrubbery and where a perfectly safe fertilizer is required. It contains phosphoric acid and some nitrogen.

Granulated Peat Moss. For greenhouse, garden and home. Our peat moss is of the finest quality you can buy anywhere at any price. Its use contributes to the humus content of the soil, lightening heavy clay and binding sandy soils. It insulates soil against freezing and thawing in winter and conserves moisture in summer. Clean, odorless and economical

Sheep Guano. An efficient fertilizer to use on lawns, in the garden, the perennial border, shrubbery beds, small fruit garden, flower beds, etc. It is safe and dependable. A natural plant food and not a chemical stimulant.

Nitrate of Soda, A fertilizer for all crops; quick in action and hastens the maturity of crops fully two weeks. It should not be applied until the plants are above the ground. Do not allow solution to touch foliage. Dissolve 1 oz. to 2 gals. or 1 lb. to 50 gallons.

Superphosphate (Acid or Rock Phosphate) is a water soluble combination of phosphoric acid and lime which is formed by the action of sulphuric acid on raw phosphate rock. It aids in plant nutrition and assists the plant to assimilate other ingredients. Superphosphate is an efficient fertilizer element for lettuce, truck crops, cereal crops, and alfalfa.

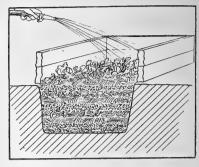
Hydrated Lime. The constant watering of lawns tends to sour the soil and eventually the lawn becomes foul with sorrell, Creeping Charlie, and other weeds which thrive in an acid soil. This condition may be improved by applying hydrated lime.

Muriate of Potash. This fertilizer is especially valuable for fruit trees and berries.

NON-WARRANTY. We exercise the greatest care to have all of our seeds and bulbs of good quality and true to name. Once sold, however, their growing conditions are beyond our control. Therefore, we operate under the usual

Seedsmen's Non-Warranty: We give no warranty, express or implied, as to the productiveness of any seeds or bulbs we sell, and will not be in any way responsible for the crop. Our liability in all instances is limited to the purchase price of the seed.

Don't forget the Compost Pile



You have a rich source of indispensable humus right in your own garden. How to make use of it? The compost pile is the answer.

All of your lawn clippings, weeds, vegetable tops, potato peelings and any other vegetable matter can be thrown into a pit or bin. When a layer a foot or so thick has accumulated sprinkle a concentrated fertilizer over the top and cover the whole with about 2 or 3 inches of soil. Repeat the whole process until your compost pile is three or four feet deep. Keep the pile moist to hasten the rotting.

In about 6 months the compost pile will be ready to use. Spread it on the garden as you would barnyard manure. Used with peat moss and commercial fertilizers compost is a really important aid to good gardening.

To keep your garden healthy. know and fight its enemies:

FUNGOUS PESTS OF THE FLOWER AND VEGETABLE GARDEN















BLACK SPOT

POWDERY MILDEW ON S GRAPES ROSES

EARLY AND LATE BLIGHTS
ON POTATOES TOMATOES

RUST ON
SNAPDRAGONS HOLLYHOCKS

PEACH LEAF

LEAF SPOTS

INSECT PESTS OF THE FLOWER AND VEGETABLE GARDEN

















EITHER WE BRING THEM UNDER CONTROL OR THEY OWN THE GARDEN





















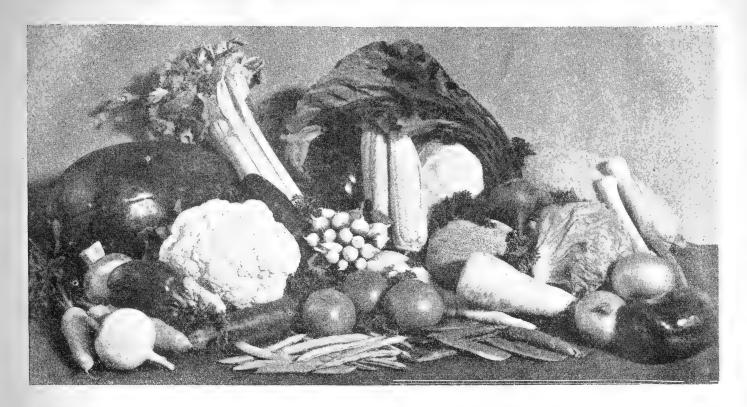
CATER-PILLARS

SNAILS SLUGS

CUTWORMS EARWIGS

GLADIOLUS THRIPS, RED SPIDER

MEALY BUGS WHITE FLY



Quality VEGETABLE SEEDS

Long experience enables us to offer you this carefully chosen selection which we know will give the best results in this area.

No matter how much work and care you put into your vegetable garden you can not expect good results unless you use reliable seed. We pride ourselves on the quality of our seeds and sell them with the confidence that you will find them the best.

ASPARAGUS

1 oz. to 100 ft., 4 lbs. per acre.

Soak seed 24 hours, sow in spring, 15 to 20 seeds to the foot. Cover 2 inches. Transplant to permanent beds the next spring.

Mary Washington. The most extensively grown variety. Large green spears with tight, purple-tinted tips, of fine quality. Heavily productive and very uniform. (Fz.) Pkt. 10c; oz. 25c.

BEANS

Bush, 1 lb. to 150 ft., 50 to 60 lbs. per acre. Pole, 1 lb to 150 hills, 30 to 35 lbs. per acre. Lima, 1 lb. to 150 ft., 30 to 50 lbs. per acre.

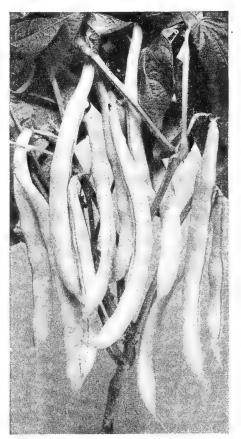
Bush, Green Pod

Prices: Fkt. 10c; ½ lb. 25c; 1 lb. 45c.

Dwarf Horticultural. Particularly desirable green shell and snap bean for home and market garden. Plant medium high, thrifty and productive. Pods dark green at snap stage (53 days).

Improved Stringless Green Pod. High quality for home and market garden. Plant large, thrifty, heavily productive. Pods medium green, 5½ inches long, almost ½ inch wide and equally thick. Very fleshy, strictly stringless, fine grained, tender. Seeds coffee brown. 53 days

Ranger. A new disease-resistant bean of great value. The pods are plentifully produced, ½ inch thick at the snap stage, 5 inches long. They are borne well up in the crown of the plant. 56 days.



BEAN GOLDEN WAX

Tendergreen (Improved Refugee). A bush bean of utmost value. The plants make a strong and vigorous growth. They are well branched and carry a great quantity of beautiful light green beans. The pods grow 6 to 7 inches long. They are round, extremely meaty, and absolutely stringless. 54 days. (Fz.)

Bush, Wax Pod

Prices: Fkt. 10c; 1/2 lb. 25c; 1 lb. 45c.

Average maturity 52 days from seed.

Black Wax, Pencil Pod. Very desirable for home and market garden and for truckers. Plants large and thrifty. Heavily productive over long period. Pods handsome bright yellow, 5½ to 6 inches long, % inch thick, cylindrical: very fleshy, stringless, brittle, fine grained, and tender. Quality unexcelled. Seeds black.

Kidney Wax, Round Pod. (Brittle Wax.) Valuable for home garden and canning. Plants are erect, medium large, prolific. Handsome pods of waxy light yellow, 5½ to 6 inches long, thick and round. Very fleshy, brittle, strictly stringless and without fibre. Seeds white with brownish-black eye.

Golden Wax, Top Notch. Blight resistant. A splendid home garden and canning variety. Plant small, productive. Pods very attractive; golden yellow; 4½ to 5 inches long, ½ inch wide thick, ovaltleshy, brittle, stringless. Seeds white, splashed with violet, carmine and purple.

ROTENOL Insecticide. Liquid Rotenone-Pyresects — Gladiolus Thrips, Red Spiders, Aphis.

1 oz., 35c — 4 oz., \$1.00, plus postage

CALOMAG Controls Cabbage Maggots. One teaspoon around base of seedling cabbage or cauliflower when transplanted to garden.

10 cz., 50c - 20 oz., 80c, plus postage

Inoculate all Legume Seeds with

-A HALF CENTURY OF SERVICE-1948 When ordering, Always state name of seed.

Size

SOYBEANS (S)

BEANS—Navy, Pinto, Wax, String, Kidney and Great Northern

PEANUTS, COW PEAS (E)

Small (Inoculates up to 120 lbs. seed)\$.30
5 bu. each55
25 bu.(One can)2.50

1 bu. each......\$.35

20 bu. (6-5 bu. cans) .. 3.25

Retail

ALFALFA (A)

Swee	t, Bu	r, Hubam Clovers
Size	T	Retail
21/2	bu.	each\$.50
-/-		()

CLOVERS (B) Red, Alsike, Crimson, White

and I	Ladın	0.						
1	bu.	each.					.\$.50
$2\frac{1}{2}$	bu.	each.					. 1	.UL
LES	PE	DEZ/	4	(L	.)		

100 to 10	њ. Ю	size lbs.)	(Inoculates up ea\$.50	
			(0)	

PEAS,			(C)
VETCH	IES	(All	Varieti	es)
100 lb.				
to 100 II	hs.)	ea		.50

	(Inoculates up
to 100 lbs.)	ea\$.50
	ea 5.70
(12-100 lb. c	ans)

LUPINES (All Varieties)

100 lb. size (Inoculates up to 100 lbs. seed) ea......\$.50 GARDEN SIZE—Peas, Beans, Sweet Peas, Lupines, Lima Beans and Edible Soybeans. Enough for 8 lbs. seed — Retail Price 10c each



SNAROL Kills Snails

Attracts and kills snails and slugs Snarol may also be used to control Sowbugs, Cutworms, Earwigs, etc. A ready prepared bait meal that

retains its effectiveness for from five to ten days after being

1-lb. packages, 35c; 21/2-lb. packages, 65c; 6-lb. packages, \$1.25; 10-lb. bags, \$2.00; 50-lb. bags, \$8.50 Postage Extra

ORDER THIS PEST CONTROL TODAY

WEEDONE

Kills Poison Ivy, Poison Oak, Bindweed, Honeysuckle, Dandelion, Plantain, other noxious weeds. Sprayed on leaves, it travels down and kills right out to the root tips. Sprayed on lawns, it kills lawn weeds without hurting the grass. Safe for humans and animals. Weedone does not hurt the soil or spraying equipment. Just mix with water and spray.

The Sensational Internal Weed Killer

75c 6-oz. can (covers 1,000 sq. ft.)

\$2.50 1-qt. can (covers 5,000 sq. ft.)

1-gal. can \$7.50 (covers 1/2 acre)

Larger quantities on request.

WHICH DO YOU WANT?

THIS



OR



The hormones and vitamins (B, and others) found together only in



THE HORMONE-VITAMIN POWDER

Stop the shock and wilt usually inevitable after transplanting all kinds of plants. . . . Simple, Safe, Economical to use. 1/2 oz. packet 25c, 1 oz. can 50c, 3 oz. can \$1.00, 1 lb. can \$4.00.



MORE TOMATOES

and more

SEEDLESS tomatoes

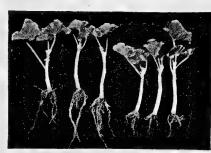
WITH

Fruitone

This plant hormone spray willhelp develop a better set and a bigger crop of tomatoes. If the

spray hits the blossoms after blooming and before pollination, the tomatoes will be seedless. Simple and easy to use, Fruitone also helps grow big berries on berry-bearing shrubs and stops pre-harvest drop on fruit trees.





Geranium Cuttings. Treated and Untreated

ROOTONE, the plant hormone powder. Dip cuttings in Rootone before planting to give

faster, better, more successful rooting. Mix flower, vegetable or grass seed with Rootone before planting to give faster growth and stronger roots. Easy to use. 1/4 or. packet 25c. 2 oz. jar \$1.00. 1 lb. can \$5.00.

ELECTRIC SEED BED HEATER

Be a month ahead of neighboring gardens

BOTTOM HEAT CAN'T BE BEAT FOR FAST SURE RESULTS

"ROOT CUTTINGS IN 6 DAYS" "SEED UP IN 30 HOURS"

"CUT GERMINATION TIME BY 2/3"

"TRANSPLANT 2 WEEKS SOONER" These enthusiastic reports from users tell what GRO-QUICK SOIL HEATING CABLE will do for you. Ideal for hotbeds, cold frames, unheated greenhouses, plant benches. For early plant starting in open ground. Operates from household current. Prepaid with full instructions at prices shown. JUNIOR 40' Cable, 200 watt with thermostat for 3x6 bed

or 20 sq. ft.

Pole Beans

Prices: Fkt. 10c; ½ lb. 25c; 1 lb. 45c. Mature in 75-80 days.

Blue Lake or Improved White Creaseback. Speendid snap bean for home gargen and early market. Good climber, heavily productive. Pods light green, 5½ inches long, ½ inch wide, almost as thick; nearly stringless, very fieshy, brittle, tender. Seeds white; excellent for baking.

Kentucky Wonder. The oldest favorite of all pole beans should be in every garden. The dark green pods are round and curved, measuring 9 to 10 inches, they are stringless when young. Seeds light brown.

Kentucky Wonder Wax. An early and hardy bean somewhat resembling the Kentucky Wonder except in color of pods which are light yellow and broader. If a wax podded bean is desired this is the one best variety to plant. Seed oval, flattened, somewhat shriveled, dark brown.

Oregon Giant. We highly recommend this variety to Northwest home gardeners. It keeps producing until killed by frost. Large, fleshy pods, 10 to 12 inches in length, stringless, light greenish yellow, splashed with red. A very tasty bean that requires very little care. I kt. 10c; ½ lb. 30c; lb. 50c.

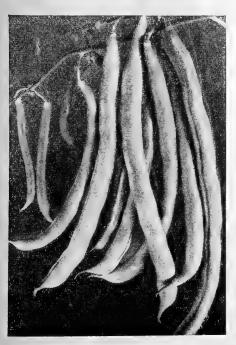
Potomac. Six inches long, slender and round, this stringless meaty bean is a good climber and heavy producer. The snap beans are excellent for home or market. (Fz.)

Ta'l Horticultural. The pods when young are of excellent quality and make fine snap beans. They measure 5 to 6 inches long and are stringless. The dried beans are grown extensively for winter use. They are large, of a light fawn color speckled with dull red. Highly recommended as a baking bean.

Lima Beans, Bush

Prices: Fkt. 10c; ½ lb. 35c; 1 lb. 50c.

Baby Potato. All-America Silver Medal Winner for 1940. Prolific; excellent flavor. Good for produce markets as well as canning and quick freezing. Seeds small and thick, of bright green color when fresh, and similar in flavor to Fordhook. (Fz.)



POLE BEAN BLUE LAKE

"Greeze Your Garden"

You can enjoy the goodness of your own garden fresh vegetables the year around by freezing them. No other method of preserving can g ve you more appetizing and flavorful vegetables for your table.

vorful vegetables for your table. The letters (Fz) indicates the best var.eties to freeze.



Burpee's Improved Bush. Plants large, heavily productive. Pods large, 4½ to 5 inches long. Usually contains 4 large, thick beans. Dry beans large, flat, greenish white. Mature in 75 days.

Cangreen. All-American Selection. Honorable mention 1943, 68 days to maturity. In all other respects resembling the Henderson Bush Lima, Cangreen is notable for the green color of the fleshy part of the seed in the dry stage. Attractive for canning, either commercially or in the home. Yields a prolific crop.

Lima Beans, Pole

Prices: Fkt. 10c; ½ lb. 35c; 1 lb. 50c. Oregon Pole Lima. Proven over many years to be well adapted to our cool Northwest climate. A strong, vigorous grower, bearing continuously until frost. Pods are at their best when yellow.

BEET

1 oz. to 100 ft., 4-6 lbs. per acre

Prefer a rich sandy loam but will produce in any well fertilized soil. Space rows 14 to 24 inches apart. All varieties: I kt. 10c; ½ oz. 15c; 1 oz. 25c.

Detroit Dark Red. The standard of excellence in table beets for home and market garden, for shipping, and for canning. Tops uniform, small, slender, erect. Roots globe shaped; symmetrical, with small collar and small tap-root. Very dark blood red. Mature in 52 to 55 days.

Early Wonder. Very desirable for home and market garden. Tops small. Root flattened globe shape and small collar and tap-root. Dark purplish red. Flesh deep purplish red zoned a lighter shade. Mature in 50 to 55 days.



BROCCOLI

Extra Early Flat Egyptian. Best for forcing and particularly valuable for early market. Tops small and upright. Roots flattened, with long slender taproots. Flesh dark purplish red zoned lighter. Ready in 50 days.

Mangel (or Stock Beet)

1 oz. to 100 ft., 6 to 10 lbs. per acre.

Valuable as stock feed. All varieties of mangels: 1 oz. 25c; ¼ lb. 60c.

Danish Studstrup, Very high yielder. Roots long oval, orange colored; flesh white with faint yellow tinge.

Giant Half Sugar. This variety is one of the favorites among the dairymen and hog raisers. It is very sweet and nutritious, as it has a higher sugar content than the ordinary mangel.

True Sugar Beet. The most desirable beet for sugar manufacture. Valuable for stock feeding. Roots medium large, 12 to 15 inches long, $3\frac{1}{2}$ to 4 inches at shoulder, tapered; white, with a tinge of gray; very rich in sugar. Good keeper.

BROCCOLI

½ oz. to 100 ft., 4 oz. per acre.

This is similar to caulif.ower and is especially suited to Pacif.c Coast states. I kt. 10c.

Italian Green Sprouting. This vigorous plant is entirely different from the white heading sorts. Cultivated like cabbage, it bears a succession of sprouting heads which, if kept cut, will be replaced by others for 8 to 10 weeks. Each sprout, about 5 inches long, ends in a small head of dark green buds. It is one of the most delicious green vegetables. (Fz.)

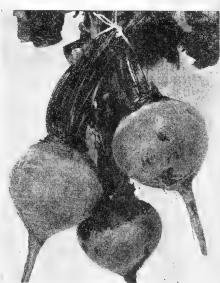
St. Valentine. Standard market variety for March shipment. Plants large. Heads large, solid, white, and very well protected.

BRUSSELS SPROUTS

½ oz. to 100 ft., 4 oz. per acre.

Can be successfully grown wherever cond.tions are favorable for late cabbage and require the same method of culture. They mature best in the autumn after the weather becomes cool. I kt. 10r.

Dwarf Improved. Plants dwarf and compact, 20 inches tall. Very uniform; stem well covered with firm, round cabbage-like balls 1½ to 1½ inches in diameter mature in succession. Pick as needed.



BEET DETROIT DARK RED

CABBAGE

Sow early varieties under glass and transplant to open ground as early as possible. Sow late varieties in open in April and May.



CABBAGE GOLDEN ACRE

EARLY VARIETIES

Mature between 60-65 days.

Copenhagen Market. Distinctly and uniformly early. Splendid for early market and shipment; valuable as an early kraut variety. Plants small, compact, allowing very close planting. Stem short; heads uniformly round; firm; 6 to 7 inches in diameter. Weight, 3½ to 4 lbs. Interior clear white and of excellent quality. Mature in 66 days. ½ oz. 40c; 1 oz. 75c.

Early Jersey Wakefield. Extremely early variety, very valuable for home and market garden as well as for shipment. Plants very small and compact, allowing close planting; stem short. Heads firm and conical; usually 7 inches long, 5 inches thick near base; weight, 2 to 2½ lbs. Pkt. 10c; ½ oz. 30c; 1 oz. 50c.

Golden Acre. The earliest round-headed cabbage; especially valuable for early market and shipping. Plants very small and compact; stem short. Heads uniformly round; firm, commonly 6 inches in diameter and weigh 3 pounds. Pkt. 10c; 1 oz. 75c.

LATE VARIETIES

Mature in 90 to 100 days.

Danish Ball Head. This is the best late cabbage. The plants are medium sized with short stems. Heads large; flattened globe shape; becomes 8 to 9 inches across, 6 to 7 inches deep, and weigh 7 to 9 pounds. Very firm and solid; of excellent quality; keeps perfectly in storage until late spring. Pkt. 10c; 1 oz. 75c.

Late Flat Dutch. The best very large, late cabbage. Popular for home and market garden. A good keeper. Heads very large and flat, but deep; become 12 to 14 inches across, 7 inches deep, and weigh 12 to 14 lbs. or more; firm, good quality. Pkt. 10c; 1 oz. 50c.

Mammoth Red Rock. A sure cropper and used very extensively for pickling. The solid heads are borne on medium-length stems and are red throughout. Perfectly round, solid as a rock, and quite large. Often weighing 6 to 8 pounds each. The latest of the red cabbages. Pkt. 10c; 1 oz. 50c.

Savoy. Enjoys great popularity on account of its tasty flavor which is more delicate than that of ordinary cabbage. The large round heads are somewhat flattened and very heavy. The deep

green, crinkled outer leaves enclose the tender, light green heart. It matures late in the fall and will keep all winter. Pkt. 10c: 1 oz. 75c.

CHINESE CABBAGE

Wong Bok. This exceptionally fine vegetable is rapidly growing in public favor. It resembles the Cos lettuce, forming long heads of crisp leaves. Very mild and pleasant flavored. Serve as a salad or cooked. Pkt. 10c; 1 oz. 75c.

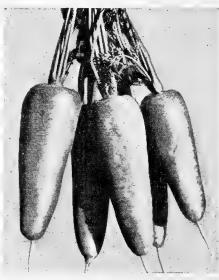
CARROTS

 $\frac{1}{2}$ oz. to 100 ft., 3 to 4 lbs. per acre.

Sow from April to July. Prefer a light, sandy soil. Pkt. 10c; 1 oz. 35c; ¼ lb. \$1.00. Chantenay, Oregon. Flesh is a deep golden orange color, always smooth and fine in texture, very tender. Excellent bunching variety and preferred by market growers. Medium early. 72 days.

Chantenay, Red Core. A fine carrot. Flesh tender and sweet, reddish orange in color with the core indistinct and of about the same color as the surrounding flesh. Suitable for canning and table use. 72 days.

Danvers Half Long. Red core. The roots are a rich dark orange and because of its symmetrical shape—long and pointed—it makes an excellent bunching variety. It has proved over a period of years to be the most popular carrot, both with the grower and the shipper. Mature in about 75 days.



CARROT CHANTENAY

Improved Imperator. This carrot grows to a length of 7-8 inches with a shoulder diameter of 1½ to 1½ inches, making a smooth crown. Does not have undesirable side shoots; have a fine texture, and is good and sweet. Deep orange. In all respects it is very attractive for shipping purposes. 77 days.

Nantes Coreless. Excellent for forcing, as well as for home and market garden use. Tops very small. Roots bright orange, cylindrical, blunt tipped. Flesh reddish orange, crisp, tender and of very delicate flavor. Practically coreless. 68 days.

Stock Carrots

1 oz. 25c; ¼ lb. 75c.

Orange Belgian. A very productive variety, with roots measuring 20 inches long. They are broad at the shoulder, and gradually taper to a fine point. The skin below the ground is a light orange, but above the soil surface it is green. Will yield heavily, particularly on good deep soil.

White Belgian. A late variety, an excelent keeper and very productive. Principally grown as stock feed, since it will yield as much as 40 tons per acre. Roots are 7 to 8 inches long, 3 inches across at the top, tapered and pointed.

CAULIFLOWER

½ oz. to 100 ft., 4 oz. per acre.

Treat the same as cabbage but gather the tops of the leaves together loosely as soon as the heads beg.n to form. **Pkt.** 10c.

Danish Giant, Dry Weather. (65 days.) One of the most dependable in adverse, dry weather. Plants dwarf, short stemmed; larger than Early Snowball. Heads large, 6 to 7 inches across, commonly weigh 2 pounds. White with tinge of cream; of splendid quality.

Early Snowball. (52 days.) The best for greenhouse forcing, early market, and shipping. Plants very dwarf. Heads snow white, deep, smooth and compact; about 6 inches across, weighing about 1½ to 2 pounds. The standard of excellence in cauliflower. (Fz.)

CELERY

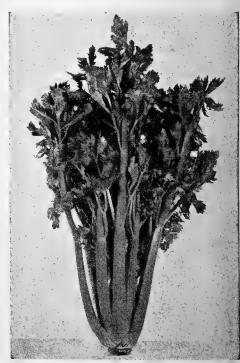
1/4 oz. to 100 ft., 4 oz. per acre.

Sow from February to May, transplanting in June to rows 3 feet apart. One ounce of seed will produce 5000 plants. Fkt. 10c.

Golden Self Blanching. Early and particularly desirable for home and market garden. Plants fairly tall and compact with firm stalks, 26 to 28 inches tall, which blanch readily and are of splendid quality.

Golden Utah. A light yellow-green selection of the original "Utah". Has superb quality and size of original, plus easier bleaching quality and more attractive sales appearance. Certainly an outstanding celery that merits your confidence.

Utah Jumbo Winter. A remarkable late celery of the finest quality. Plant sturdy, compact and solid. Very free from strings. Light green in color; nutty flavor.



CELERY

CELERIAC

1/4 oz. to 100 ft., 4 oz. per acre.

Give the same culture as celery, but do not earth up. $Pkt.\ 10c.$

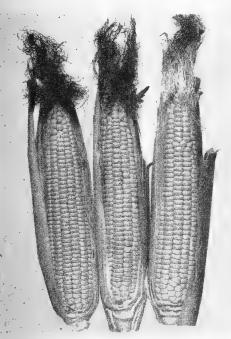
Large Smooth Prague. An improved variety of turnip-rooted celery producing large tubers of nearly globular shape and comparatively smooth surface.

CHICORY

1 oz. to 100 ft., 4 to 5 lbs. per acre.

Sow chicory when weather becomes warm and settled. Sow in rows at least 24 inches apart and thin to 3 inches between plants. Pkt. 10c.

Witloof or French Endive. One of the best and most attractive of salad vegetables. Seed sown in spring produces long thick roots by November. To force for use, dig roots in fall and trim the leaves off an inch above the crown. Trench in a warm, dark place, covered with 6 or 8 inches of soil and a top layer of fresh manure. A handsome, compact cluster of blanched leaves resembling Endive result. They are tender and have a rich, mildly acrid flavor.



CORN GOLDEN CROSS BANTAM

CORN

Sweet corn, 8 oz. to 100 ft., 10 to 14 lbs. per acre.

Plant in rich, warm soil, in hills, 2 to 3 feet apart, in rows 3 feet apart for early kinds and 4 feet apart for late sorts. Make first sowing about the middle of May and continue fortnightly up to about the middle of July. Corn should be planted in blocks of at least 4 rows.

Hybrid

Pkt. 10c; ½ lb. 25c; lb. 45c. Listed in order of ripening.

Spancross. (73 days.) Very early. Well filled 6-inch ears of a medium yellow. Good quality. Plants grow 4 to 5 ft. tall. Marcross. (76 days.) Stalks short but sturdy, highly resistant to bacterial wilt. Ears long, plump, abruptly tapered at tips: 10-14 rowed, with light cream-yellow medium-broad kernels of good quality.

Carmeleross. 79 days. Large, 8-inch ears, well filled with medium-yellow kernels. Good flavor and quality. Early. Plants 4½ to 5 ft. high.

Golden Cross Bantam. (88 days.) Very uniform in habit of growth, size, and maturity. The ears measure 8 inches long and they are closely set with 14 rows of light yellow grains filled with delicious sweet pulp. Bears two ears per plant. (Fz.) Pkt. 10c; ½ lb. 35c; 1 lb. 50c.

Open — Pollinated — Yellow

Pkt. 10c; ½ lb. 20c; 1 lb. 35c.

Golden Bantam. 8-row. (79 days.) Slender ears 5½ to 6½ inches long have 8 rows of even golden kernels of good flavor. Very sweet. Popular with the home gardener and for commercial purposes. (Fz.)

Golden Bantam Improved. (81 days.) A selection from the original strain of Golden Bantam. Larger ears, more rows of kernels, greater production. Golden yellow, deep, wide, tender kernels with a fine sweet flavor. Particularly desirable for canners and market gardeners. Remains in table condition a long time.

Golden Early Market. (77 days.) One of the best extra early yellow varieties for home and market garden. Ears have strong husks and 8 to 12 beautiful tender rows to each ear. Kernels golden yellow, medium, sweet and of good flavor.

CUCUMBER

1 oz. to 100 ft.. 3 to 4 lbs. per acre. Mature in approximately 60 days.

Sow outdoor varieties early in spring, in hotbeds, and transplant to open ground when weather is suitable. For later crop, sow seed when weather becomes settled, in hills of 5 to 6 inches apart. They require a warm, rich soil, and should be watered liberally. Pkt. 10c; 1 oz. 25c; 4 oz. 75c; 1 lb. \$2.25.

Boston or Chicago Pickling. (59 days.) An early pickling or slicing variety. Fruits weigh about 1½ pounds and are 6 inches long and 2½ inches in diameter.

Cubit. All-America Bronze Medal, 1944. Handsome, long, cylindrical fruits of dark green exterior, with crisp, white flesh and small seed area. Excellent for home and shipping.

Davis Perfect. (68 days.) A splendid dark green variety, excellent for slicing and a good shipper. Very dark green, white spined. The color is retained a long time when pickled. Tapered somewhat at both ends. Seeds few.

Improved Long Green. (67 days.) This is a great improvement over the old strain of Long Green. The fruits are unusually handsome, being of good form and of a deep green color which is retained a considerable time after picking. 9 to 10 inches

Lemon, (65 days.) Little cucumbers resembling lemons in both form and color and have a delicious and distinctive flavor. Fine for preserves or sweet pickles and considered superb as a salad. Prolific.

National Pickling. (56 days.) A highly desirable pickling strain. Fruits weigh 1½ pounds; are dark green, symmetrical with thick walls; full ended. Slightly shorter than Chicago Pickling. Pkt. 10c; oz. 20c; 4 oz. 65c; 1 lb. \$2.00.

Straight 8 (66 days.) An outstanding new variety producing symmetrical, cylindrical fruits about 8 inches long and 1½ inches in diameter. Fruits are well rounded at the ends and when ripe are deep green and free from objectionable striping or tipping. Ideal for home or market gardens.

Gherkin or Burs. Of superior quality for pickles. Not a true cucumber. Very prolific; fruits are ready for pickling in about 60 days. Fruits pale green; prickly over entire surface. 1½ to 2 inches long; oval; uniform; seeds numerous and small

EGGPLANT

1/4 oz. to 100 ft., 5 to 6 oz. per acre.

Sow in mild heat, about the middle of March, and transplant on June 1, setting the plants $2\frac{1}{2}$ feet apart. Pkt. 10c; oz 65c.

Black Beauty. (80 days.) The fruits of this variety are large and symmetrical. Retains its glossy black-purple coloring for a long time. This lasting quality makes it distinctly popular.



EGGPLANT

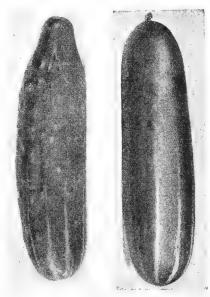
ENDIVE

1 oz. to 100 ft., 4 to 5 lbs. per acre.

Sow about the middle of April, in rows 1½ feet apart, and thin out to about 9 inches apart. Pkt. 10c; oz. 25c; 4 oz. 75c.

Broad-leaved (Escarolle). Leaves long, broad, and succulent. Fine for winter salads and cooking.

Large Green Curled (Pink Ribbed). Outer leaves bright green, midribs tinged with rose. Center leaves blanch readily. Makes attractive salads. Vigorous and resistant.



CUCUMBER

The Complete FERTILIZER with an ORGANIC Base!

An "All Purpose Fertilizer" for general use on lawns, and flower and vegetable beds. For best results apply Spring, early Summer and Fall.

	lbs	
	ibs	
50	lbs	2.50
100	lbs	4.40





Make Valuable ORGANIC MANURE

Compost making is easy with COMPO . . . the "self-starter" turns grass clippings, leaves, garden and kitchen refuse into rich, organic manure. Compost is rich in all the elements necessary to sturdy, healthy plant growth. Simple directions on the convenient COMPO

5 LBS...65¢

A HIGH GRADE COMPOSTING MATERIAL



Protect Your Garden Against Pest Damage

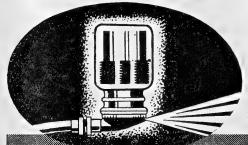
ATTRACTS AND DESTROYS

Effective RAIN or SHINE! For Snails, Cut Worms, Slugs, Earwigs, Root Weevils and other pests of like chewing Safe, convenient, economical.

21/2 Lbs. .65

APPLE BASE WITH METALDEHYDE

Less Watering Greener Lawns - - -



FERTILIZING

GAT-SPRAYER

V NO ODORS

√ NO WASTE

Price \$1.45 each (glass jar not included)

ACME Sprays and Dusts

ACME TOMATO DUST controls blight and worms on tomatoes. While designed for to-matoes, it also is effective in the control of leaf chewing insects and blight on vegetables such as potatoes, cucumbers, beans and cabbage, also many flowers as roses, azalea, evergreens, asters, and hollyhock.

1-lb sifter carton......50c 1-lb. pump gun..65c 4-lb.87c

ACME ARSENATE OF LEAD is the widest used arsenical insecticide. Safe on tender foliage for the control of chewing insects on fruit trees, vegetables, tobacco, and many other plants. Controls grubs in lawns. 1-lb. carton....50c 4-lb. bag.....\$1.30

ACME WETTABLE DUSTING S"LPHUR

ACME ROTENONE GARDEN GUARD is an ideal insecticide for the home garden. Dust or spray. The killing ingredient is Rotenone — non-injurious to human and warm blooded animals. Acts both as content and extractions of the spray of tact and stomach poison against a wide

ange of insects. 1-lb. sifter carton.55c 1-lb. pump gun.70c

KALE, Borecole

1 oz. to 100 ft., 4 to 5 lbs. per acre.

Culture same as late cabbage.

Pkt. 10c; 1 oz. 20c; ¼ lb. 60c.

Dwarf Green Curled Scotch. (55 days.) Plants have wide-spreading, finely curled blue green plume-like leaves. Relished vegetable green and useful as an ornament.

Tail Green Curled Scotch. (60 days.) Hardy plants with leaves deeply cut. Curled at the edges, light green in color; very tender and finely flavored after touched with frost.

Jersey or Thousand Headed. Called Chicken or Cow Kale. Vigorous branch-ing plants with enormous cabbage-like leaves. Relished by poultry and livestock as winter greens.

KOHL RABI

1/2 oz. to 100 ft., 4 to 5 lbs. per acre.

The delicious flavor of this turnipshaped bulb combines both cabbage and turnip. As early in spring as possible, sow the seed in light rich soil in rows 11/2 feet apart. When plants are well established, thin to 6 inches apart in the row. I kt. 10c; 1 oz. 50c.

Early White Vienna. (55 days.) For forcing. The best table sort if used when the bulbs are 2 inches in diameter. It matures very early and produces medium sized light green bulbs with white flesh of excellent quality.

LEEK

Large American Flag. An early popular sort. Stems 8-10 inches long, 1½ inches thick; white, and attractive. Leaves large, medium green, drooping backward. I kt. 10c; oz. \$1.00.

LETTUCE

 $\frac{1}{2}$ oz. to 100 ft., 3 lbs. per acre.

Sow indoors in February and March, planting outdoors when weather is suit-

Pkt. 10c; 1 oz. 40c; 1/4 lb. \$1.20.

Bibb Lettuce. (57 days.) Rather small heads used as forcing lettuce in the south. Leaves are smooth, dark green, heart butter yellow. Excellent quality.

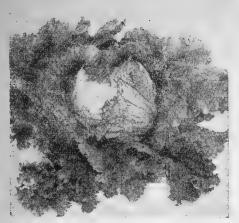
Great Lakes (83 days.) A heading variety of the Imperial type developed by U. S. Department of Agriculture and Michigan Experiment Station. Leaves large and well folded; ribs heavy. Shows considerable resistance to tipburn and ability to head under adverse conditions. I kt. 15c; 1 oz. 50c.

Improved Hanson. (82 days.) A very hardy lettuce, excellent for a summer crop as it withstands heat. Forms a large, light green head which is very hard. An excellent variety for the home gardener for it is very sweet, crisp and

Imperial No. 152. (Mature in 83 days.) Medium large, solid and attractive heads. Well adapted for early fall planting and dependable in heading. Resistant to brown blight.

New York No. 515 Improved. A development from Number 12, matures slightly earlier. Resistance to tip-burn makes this lettuce ideal where hot weather pre-

Red Leafed Mignonette. 80 days. These small crisp heads of early lettuce have curled outer leaves of medium green tinged with reddish-brown. They are compact with a blanch light creamyyellow color throughout.



GREAT LAKES LETTUCE

LEAF LETTUCE

Pkt. 10e; 1 oz. 30e; ¼ lb. 75c. *

Black Seeded Simpson. (45 days.) A good non-heading or cutting lettuce with broad, light green, frilled outer leaves. Center leaves are almost white. Crisp leaves with a delicate flavor.

Grand Rapids. Very early. Hardy, disease resistant. The most widely used and best adapted variety for greenhouse forcing. Plants large, upright, compact, and handsome; bright solid, light green, large leaves with broad, much frilled margin. Very tender and sweet when grown under glass.

Oak Leaf. Shaped like an oak leaf. Stands up well in hot weather and does not turn bitter. Pkt. 15c; 1 oz. 50c.

Red Leaf Prize. An early non-heading sort, very desirable for home garden use. Plants of medium size, crisp and tender; color medium green with brownish-red edges on outer leaves.

MUSKMELON

1 oz. to 100 ft., 3 to 4 lbs. per acre.

Where summers are short sow in pots indoors, planting out in rich, well manured soil when danger of frost is over.

Pkt. 10c; 1 oz. 25c.

Cranshaw. (96 days.) A thick-fleshed melon with salmon color inside, golden green outside. Round at base, stem end pointed. Weighs 7 to 8 pounds.

Hale's Best Improved No. 36. (80 days.) Fruits slightly oval, weight 3 to 4 pounds. Flesh exceptionally thick, deep salmon in color, sweet, aromatic and of very fine quality. Uniform in shape.

Hale's Best, Jumbo Strain. An outstanding shipping variety. Fruits slightly oval, uniform. Flesh exceptionally thick, deep salmon in color; sweet, and of very fine quality. Has a delightful aroma. Ripe in 75-80 days.

Hearts of Gold. (100 days.) This popular medium sized melon follows the earlier varieties. It is fine to plant for succession as it ripens in about 100 days. The fruits are 5 to 6 inches in diameter. The smooth orange salmon flesh is exceptionally thick and fine flavored.

Imperial No. 45. (87 days.) Extensively used because of resistance to downy mildew. Similar to Hale's Best but only faintly ribbed. An exceptionally good shipper.

Rocky Ford or Netted Gem. (92 days.) Fruits are small with rather large seed cavity, nearly round; no ribs, and heavily covered with hard gray netting. Flesh thick, green in color with gold tinge at the center. Juicy, spicy, and of good quality.

OTHER MELONS

Casaba. (110 days.) The casaba is a melon for the late season after the muskmelons are past. Fru.ts are medium, large, globe shaped, weigh 6 pounds; outer color golden yellow, surface wrinkled. Flesh white, luscious and spicy.

Honey Dew. (112 days.) A very fine melon. Fruits large globular, weigh 5 to 7 pounds. Surface is smooth, hard, with practically no netting, creamy white. Flesh light emerald green, thick, ripening to the rind; juicy and tender, with a distinct sweetness not found in other melons.

Persian. (115 days.) A late, slow growing variety. Fruits globular: rind very dark green, netting fine but sparse. Flesh thick, orange-pink in color. Of a distinct and delicious flavor.



ONION YELLOW GLOBE DANVERS

MUSTARD

½ oz. to 100 ft., 4 lbs. per acre.

Make successive sowings in open from early spring to midsummer.

Pkt. 10c; 1 oz. 20c.

Southern Giant Curled. The leaves are large, light green with a tinge of yellow, and much crumpled and frilled at the edges. The plant is upright or slightly spreading in growth. This variety is valued in the South for its vigor, hardiness, and good quality.

Mustard Spinach or Tendergreen. Strictly speaking it is not a variety of mustard. A quick growing plant from the Orient. Leaves oblong, broad, fairly smooth with light green center ribs. Slow to seed, resistant to heat and drought. The flavor combines that of spinach and mustard.

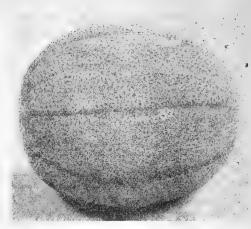
OKRA or GUMBO

 $2\,$ oz. to 100 ft., 8 to 10 lbs. per acre.

Sow seed early in May, in rows 3 feet apart and 2 inches deep. As plants appear, thin out to about 1 foot apart. Pkt. 10c; 1 oz. 20c.

Improved Dwarf Green. Early. Short, thick pods.

Perkin's Mammoth Long Pod. Standard medium early sort for home, market garden and canning. Plants 4 to 5 feet tall; pods dark green, fleshy, tender; become 7 to 8 inches long, 1½ inches in diameter. Distinctly ribbed and tapered.



MELON HALE'S BEST

ONIONS

½ oz. to 100 ft., 3 to 4 lbs. per acre.

As early as soil can be worked in spring, sow the seeds thinly in drills 1 foot apart, and cover lightly, later thinning out to about 6 inches apart in the row. The soil must be well fertilized and be made very friable. In hot weather, water frequently. Ikt. 10c; 1 oz. 75c.

Crystal Wax Bermuda. Medium size, pure, waxy white. One of mildest sorts grown.

Utah Sweet Spanish. A large, globe snaped brown onion, weighing 1 to 3 pounds. Small tops. Flesh mild and sweet. Good for slicing. Most popular marketing onion.

White Portugal, or Silverskin. A good second early white flat onion. It should be planted any time from November 1st until April 1st. It is a good keeper and desired for shipping.

White Bunching or Pickling. Excellent and one of the best for green onions. Crisp and mild, attaining a good size before bulbs form.

White Sweet Spanish. (112 days.) A very large onion with pure white flesh, similar to the Yellow Sweet Spanish. A good keeper. Globular with small neck.

Yellow Globe Danvers. An outstanding variety. Dependable, medium late, hardy, and excellent keeper; used for shipping and storage. Bulbs medium size, spherical, clear yellow, firm and solid with tough, clinging skins. Flesh white.

ONION SETS

Sets are northern grown, hardy, carefully cleaned, graded and packed. Produced for western conditions. Plant onion sets deep for green onions and shallow for dry onions. 1 lb. to 50 ft.

PARSLEY

½ oz. to 100 ft., 3 to 4 lbs. per acre.

Grows best in rich mellow soil and should be sown as early as possible in spring. Pkt. 10c; 1 oz. 20c.

Extra Triple Curled (Moss Curled). This vigorous compact grower is one of the most popular varieties because of its deep green color and tightly curled leaves that look like moss. It is unusually decorative.

PARSNIP

1 oz. to 100 ft., 3 to 4 lbs. per acre. Sow in deeply worked, manured soil. Pkt. 10c; 1 oz. 25c.

Harris Model. An especially smooth parsnip free from side roots with a very attractive whitish color. Roots about 12 inches long with a well proportioned shoulder uniformly tapered to the tip. Very tender and good flavor.

Hollow Crown, Thick Shoulder. This is the best and most popular variety in cultivation. The skin is smooth and white, while the flesh is tender. The roots grow 18 to 20 inches in length.

1½ lbs. to 100 ft., 90 to 180 lbs. per acre.
 Prices: Fkt. 10c; ½ lb. 20c; 1 lb. 35c.

FIRST EARLY VARIETIES

Alaska. (55 days.) This variety is extremely early. The round pods, 2½ inches long, contain 5 to 8 peas which are ready for use in about 55 days. The peas are small, round, and tender. The vines are 2½ to 3 feet tall.

Gradus. (55 to 62 days.) A very popular second early, large podded variety for home use and market. Vines 36 inches tall, medium green, stocky. Pods single, broad plump, pointed, medium green; contain 8 to 10 large, delicious peas. (Fz.)

Laxton's Progress. (60 days.) A little earlier than other dwarf large podded peas, this variety is generally considered the best of its class. The blue green pods are often more than 4 inches long and contain 8 dark green peas of finest quality. The seeds are large, wrinkled green and cream. (Fz.)

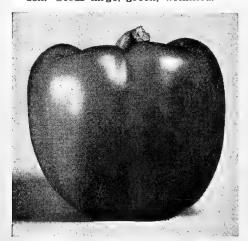
Little Marvel. (64 days.) Outstanding among dwarf peas for the exceptional quality and yield. Valuable for home garden and early market. Vines dark green, 18 inches tall, stocky. Pods single and double, dark green, blunt, plump, well filled with 7 to 8 tender peas.

Mature to pick in about 75 days. Improved Stratagem. A superior late variety. Vines deep green, 26 inches tall, stocky and branching. Pods single and paired, wide, nearly round, straight, pointed, dark green. Contain 8 to 10 tender peas.

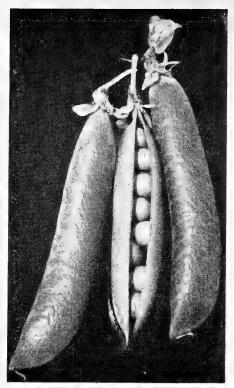
Tall Telephone or Alderman. A hand-some, large podded variety. Unexcelled for home gardens, for local markets and

for home gardens, for local markets and for shipping. Bears immense crops. Wilt resistant. Pods single, very broad, plump, straight, dark green, pointed, contain 8 to 10 peas of highest quality. (Fz.)

Dwarf Telephone. Only about 2 feet tall, otherwise resembling Alderman. The pods are well filled with peas of the same good quality. It is an excellent variety to follow the early peas in the home garto follow the early peas in the home garden. Seeds large, green, wrinkled.



PEPPER CALIFORNIA WONDER



PEA GRADUS

PEPPER

4 oz. to 100 ft., 1 to 2 lbs. per acre.

Culture, soil and temperature requirements are about the same as for eggplant. A moderate dressing of Guano, poultry manure, or complete commercial fertilizer, hoed into the soil after the plants are 6 to 8 inches tall, will be very beneficial. Pkt. 10c; 1 oz. 75c.

California Wonder. Thickness of flesh alone, which is often % of an inch, places this sweet pepper above all others. It is crisp and juicy, too, without a trace of pungency. Vigorous growing plants bear a heavy yield of blocky fruits that become as much as 5 inches long and 4 inches wide.

Chinese Giant. Fruits are often 6 inches across and 4½ to 5 inches deep. The flesh is moderately thick and very mild. Rich bright green when young, and bright cherry red at maturity.

Large Bell or Bullnose. A popular, early, sweet prolific sort. Small, erect plants. Fruits blunt; flesh of fine quality and mild flavor. Much used for stuffing.

Long Red Cayenne. This well known, medium early pepper is especially good for drying purposes. The fruit is 4 inches long and 1 inch thick, twisted and pointed. It is deep green when young and bright red when ripe. The flesh is strong and pungent.

Perfection Pimento. A splendid canning variety, adapted to home and market garden culture. Plants large, erect, prolific. Fruits heart shaped, very smooth; flesh exceptionally thick, sweet and mild.

Worldbeater. 73 days. Large 5 by 3 inch fruits, three and four lobed, have a thick flesh and a mild, sweet flavor. A good keeper, it is dark green turning dull red when ripe. Uniform dwarf plants are 19 inches tall.

PUMPKIN

4 oz. to 100 ft., 3 to 4 lbs. per acre.

Pumpkins are typically American, and pumpkin pie is one of our truly American dishes. They are less sensitive to unfavorable conditions of soil and weather than melons or cucumbers, but they are cultivated in about the same way. Pkt. 10c; 1 oz. 25c.

Kentucky Field or Dickenson, Fruits very large, flattened, furrowed. Skin creamy buff; flesh extremely thick, deep salmon-yellow and of good quality. Dependably early and heavily productive. Good for canning. Squash bug resistant.

Large Yellow or Connecticut Field. This sort is grown largely in the corn field for stock, but the flesh is moderately fine grained, highly flavored, and very good for pies. The fruits weigh about 20 pounds and are a deep orange yellow.

Sugar or New England Pie. The earliest and best variety for pies. Fruits commonly 6 inches long and 8 to 9 inches in diameter; flattened, furrowed. Skin smooth, of a rich, reddish-orange color: rind hard. Flesh is thick and orangevellow.

Winter Luxury. This variety is very popular for the home garden. The fruit matures in 75 to 80 days, weighs 8½ pounds, and is nearly round. The skin is light yellow with a russet tinge and finely netted; the flesh is rich creamy yellow, thick, sweet, and finely flavored.

RADISH

1 oz. to 100 ft., 10 to 12 lbs. per acre.

For an early crop, sow in hotbed in January, February and March. As soon as ground is fit to be worked, sow seed in the open, in rows 1 foot apart. Pkt. 10c; 1 oz. 20c; 4 oz. 50c.

Crimson Giant. A favorite with home gardeners. Large globular root, 1 to 1½ inches in diameter, crimson, flesh f.rm.

Early Scarlet Globe. The earliest of all forcing radishes grown for market. Globular, uniform size, bright scarlet. white flesh, crisp and tender.

Early Scarlet Turnip-White Tip. This variety grows very quickly and is ready for picking in 25 to 30 days. Scarlet in color, turnip shaped, very crisp and of excellent flavor. One of the best varieties for the home gardener.

French Breakfast. A splendid variety for home use; oblong, bright scarlet, white tip. Grows about 1½ inches long and % inch thick.

Long White Icicle. Long slender roots which remain tender and crisp until mature. The small top permits close planting, Early,



RADISH EARLY SCARLET GLOBE

Sparkler. 25 days. An early variety of a superior strain of the old Scarlet Turnip white tipped. 1½ inch in diameter with bright scarlet top, a clear white base and small slender roots, this radish is excellent for the home garden or growing for market.

WINTER VARIETIES

Black Spanish Long or Round. A hardy, large, rather pungent variety for winter use. Keeps unusually well; is 8 to 9 inches long and 2 inches thick, slightly tapered. The skin is black and the flesh white and crisp. Round, about 4 inches in diameter.

Chinese White Winter (Celestial). Clear white and smooth; about 8 inches long, 2½ to 3 inches in diameter. Square shoulder and blunt bottom. Flesh white, firm, and crisp; mild; not as pungent as most winter varieties.

Scarlet China Winter (Chinese Rose Winter). A large rose-colored variety from the Orient. Hardy and rather mild. The flesh is white, and very crisp. This variety is broadest at its base and is 4 to 5 inches long.

RUTABAGA or SWEDE

1 oz. to 100 ft., 2 to 4 lbs. per acre.

The culture is the same as for turnip, but if anything, less exacting in care. Pkt. 10c; 1 oz. 20c; ¼ lb. 75c.

Improved American Purple Top (or Long Island Improved). The old, popular standard sort both for stock feeding and table use. Flesh yellow, solid and sweet. Is globe shaped, of large size, of fine quality.

Purple Top Neckless. Resembles Purple Top but has a medium top and very small neck. Roots are large, flattened globe in shape, yellow with purple top. Flesh is yellow, firm and of excellent quality.

SALSIFY, Vegetable Oyster

1½ oz. to 100 ft., 7 to 8 lbs. per acre.

Sow in deeply worked, well manured soil avoiding coarse and fresh manure. Pkt. 10c; 1 oz. 50c.

Mammoth Sandwich Island. Large and strong growing with long, smooth, white, tapering roots. Less likely to branch than those of other sorts.

SPINACH

1½ oz. to 100 feet, 10 to 20 lbs. per acre.
 Sow early in the open.
 Pkt. 10c; 1 oz. 20c.

Bloomsdale Improved Thick Leaf. The seed of this thick leaved variety produced the largest spinach. Growth is rapid and the leaves remain in good condition a long time. The medium green leaves are large, rounded, slightly crumpled, succulent, and tender. (Fz.)

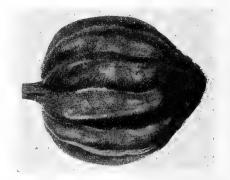
Nobel, or Giant Thick Leaved (All-American). Of rapid growth. The leaves are the largest of any type and keep well after picking; medium-green, rounded, slightly crumpled, succulent and tender. Excellent for the home garden.

New Zealand. Not true spinach though similar when cooked. Thrives in hot, dry weather. The large, spreading plants have small, thick, pointed, deep green leaves, which can be picked repeatedly throughout the season.

SQUASH

Vining, 1 oz. to 100 feet, 4 lbs. per acre. Bush, 1 oz. to 100 ft., 4 to 6 lbs. per acre.

Seeds should be planted about the middle of May, in hills 4 feet apart for bush



ACORN SQUASH



BLACK ZUCCHINI

varieties, and 10 feet apart for the running sorts. Put 5 to 8 seeds in each hill; afterwards thin out, leaving 3 or 4 of the best plants. Pkt. 10c; 1 oz. 25c; 4 oz. 75c; 1 lb. \$2.00.

Zucchini or Italian. The favorite Italian squash. It should be eaten when quite young, 4 to 6 inches long. It is a delicious summer variety; very prolific, a few hills will suffice to keep the family well supplied the entire summer. (Fz.)

Black Zucchini. Considered by many to be a better variety than the older type. Similar in all respects but dark green, smooth and cylindrical, without striping or mottling.

Early Summer Crookneck. Very early, 60 to 65 days. The bushy plant is very productive. Fruits attractive, weighing about 2 pounds. The skin is distinctly warted and bears a bright yellow color, while the flesh is pale cream, firm, and tender. A very good sort for home planting.

Early Prolific Straightneck. The peak of perfection in a summer squash. Fruits straight and smooth, of a delicate creamy color. Vines produce abundantly, 50 days.

White Bush Scallop. A popular variety bearing profusely small, rather flat, white squashes with a distinct scalloped edge. Is very early and has a fine flavor.

Golden Hubbard. A very good variety of medium size, weight about 8 pounds. An excellent keeper, has a thick rind which is a beautiful golden yellow.

Improved Hubbard. Large and of warty Hubbard type. Shell dark green, hard, moderately warted. Flesh light orange, very dry and richly flavored. One of the best winter squashes.

Table Queen or Danish. Small, dark green, acorn shape. Flesh deep yellow, dry, richly flavored. Medium early. A good keeper. Easy to grow. Delicious when served baked whole. Before serving cut open and remove seeds.

Banana. A late trailing sort, cylindrical and pointed at blossom end. A fine squash for pies. Free from fiber or stringiness. Flesh thick, deep yellow, dry, and of a sweet flavor. Has slate-grey rind.

Umatilla Marblehead. Thick meated squash. Large, slate colored variety. Yields heavy.

QUANTITY OF SEED AND SPACING FOR HOME AND MARKET GARDENS

	Seed	Seed	Distance	Distance Depth		Seed	Seed	Distance Distance Depth
	Required	Required	between	apart of		Required		between apart of
VEGETABLE	for 50 ft.	to sow	rows	in row planting	VEGETABLE	for 50 ft.		rows in row planting
	of row	an acre	inches	inches inches		of row	an acre	inches inches inches
Artichoke, Globe	1/4 oz.	6 to 8 oz.	40 to 48	18 to 24 1	Kohl Rabi	1/4 oz.	4 to 5 lbs.	14 to 24 4 to 6 1/2
Asparagus		4 lbs.	14 to 24	3 to 6 1	Leek	1/4 02.	4 lbs.	14 to 36 2 to 3 %
Beans, Bush		50 to 60 lbs.	24 to 30	2 to 3 11/2 to 2	Lettuce	1/4 oz.	3 lbs.	12 to 18 4 to 12 1/4
Beans, Lima		30 to 50 lbs.	24 to 36	3 to 6 1 ½ to 2	Melon, Musk	1/2 oz.	3 to 4 lbs.	70 to 80 36 to 60 %
Beans, Pole		30 to 35 lbs.	36 to 48	6 to 8 1 ½ to 2	Melon, Water		3 to 4 lbs.	70 to 80 36 to 60 %4 72 to 96 72 to 96 %4 14 to 24 6 to 9 1/2
Beet		8 to 14 lbs.	14 to 24	3 to 4 ½ to 1	Mustard		4 lbs.	14 to 24 6 to 9 1/2
Beet, Mangel & Sugar		6 to 10 lbs.	18 to 24	6 to 9 ½ to 1	Okra		8 to 10 lbs.	24 to 40 18 to 24 1
Swiss Chard		6 to 10 lbs.	18 to 24	10 to 12 1	Onion		3 to 4 lbs.	18 to 24 3 to 4 34
Broccoli		4 oz.	20 to 36	16 to 22 ½ to 1	Onion (for sets)		60 to 85 lbs.	12 to 14 Not thin'd 34
Brussels Sprouts		4 oz.	20 to 36	16 to 22 ½ to ¾	Parsnip		3 to 4 lbs.	18 to 24 3 to 4 1/4 12 to 20 6 to 8 1/4
Cabbage	. 1/4 oz.	4 oz.	18 to 36	14 to 24 ½	Parsley		3 to 4 lbs.	
Cardoon	. ½ oz.	5 oz.	20 to 32	20 to 30 ½ to 1	Peas		90 to 180 lbs.	24 to 36 1 to 2 1 to 2
Carrot	. ¼ oz.	3 to 4 lbs.	16 to 24	1 to 3 ½	Pepper		1 to 2 lbs.	20 to 30 18 to 29 1/2 24 to 36 18 to 24 6
Cauliflower	. 1/4 oz.	4 oz.	24 to 30	20 to 24 ½	Potatoes		800-1000	
Celery	, ½ oz.	4 oz.	24 to 30	4 to 6 1/4	Pumpkin		3 to 4 lbs.	96 to 110 60 to 84 34 12 to 18 1 to 2 4
Chicory	. ½ oz.	4 to 5 lbs.	20 to 36	2 to 3 ½ to 1	Radish		10 to 12 lbs. 3 lbs.	24 to 42 20 to 24 %
Collard	. 1/4 OZ.	5 oz.	24 to 30	14 to 18 ½	Rhubarb		2 to 4 lbs.	18 to 24 4 to 7 4
Corn, Pop	. 3 oz.	6 to 8 lbs.	34 to 40	6 to 8 1	Rutabaga		4 to 5 lbs.	20 to 24 6 to 10 1/2
Corn, Sweet	. 4 oz.	10 to 12 lbs.	30 to 42	9 to 12 1	Sage		7 to 8 lbs.	18 to 24 2 to 3 %
Corn Salad	. 2 oz.	10 to 12 lbs.	14 to 18	3 to 4 %4	Sorrel		4 to 5 lbs.	18 to 22 2 to 3 14
Cress		10 lbs.	12 to 18	2 to 4 ½ 12 to 36 ½ to ¾	Spinach		10 to 20 lbs.	96 to 110 60 to 84
Cucumber	. ½ oz.	3 to 4 lbs.	48 to 60		Squash, Bush		4 to 6 lbs.	42 to 48 42 to 48 1
Dandelion		5 to 6 lbs.	18 to 22	6 to 10 ½ 4 to 6 ½	Squash, Vining	1 oz.	4 lbs.	72 to 90 60 to 90 1
Dill		5 lbs.	20 to 36	18 to 24 1/2	Sunflower		7 to 8 lbs.	48 to 70 10 to 12 1
Egg Plant		5 to 6 oz.	24 to 36 18 to 24	8 to 12 1/2	Tomato		2 oz.	40 to 60 36 to 40 14
Endive		4 to 5 lbs.	18 to 24 24 to 32	5 to 8 %	Tobacco		2 oz.	36 to 48 24 to 36 14
Fennel		3 to 4 lbs.	24 to 32	8 to 12 ½ 5 to 8 ¾ 14 to 22 ⅓	Turnip		2 to 3 lbs.	40 to 60 36 to 40 36 to 48 24 to 36 12 to 20 2 to 4 3
Kale	. ½ oz.	4 to 5 lbs.	24 10 32	14 00 44 73		12 020		

SWISS CHARD

1 oz. to 100 ft., 6 to 10 lbs. per acre. The tops are used like sp nach. Culture like beets. Thin to 8 inches. Tkt. 10c; 1 oz. 25c.

Lucullus, Dark Green. The fleshy crumpled leaves of this variety make very choice greens. Plant erect; stalks rounded and finely ribbed. Foliage a rich deep green. (Fz.)

Rhubarb Chard. A Swiss Chard that looks like Rhubarb. The leaf stalks are bright but delicate, translucent crimson; the rich color extends out through the veins into the dark green, heavily crumpled leaves. Different, tasty, delicious flavor. Easily grown, thrives everywhere.

TOMATO

1/8 oz. to 100 ft., 2 oz. per acre.

In February or March sow seeds lightly in rows in greenhouse, hotbed, or window box, and when plants have reached a height of 3 inches, transplant in hotbeds. About June 1, set out in open ground, 4 feet apart, giving plenty of well rotted manure to each plant. Water freely during hot weather. To obtain the best results, trellises or stakes should be used. Ikt. 10c; 1 oz. 70c; 4 oz. \$2.00.

Bonny Best. One of the very best early varieties (75 days) for table and canning. Vine medium, not very hardy. Fruits medium sized, apple shaped, smooth; solid, bright scarlet in color, of excellent quality.

Earliana Improved. (65 days.) One of the earliest scarlet fruited varieties. Medium size, almost seedless and solid. Vine open and spreading. A heavy bearer. Succeeds everywhere.

Jubilee. (72 days.) Tomato of real merit; it is different from any other tomato of its class. Fruits are bright orange-yellow, globular and weigh about 6 ounces.

Marglobe. (73 days.) Excellent home garden variety and particularly valuable for shipping. Plants thrifty and heavily productive with a long bearing period. Fruits uniform deep scarlet; large; uniformly globe shaped; smooth, solid, and of distinct quality.

Pearson, Improved. (76 days.) Primarily for canning but also of value as a shipper. Vigorous self-topping plants with ample foliage to protect the heavy set of fruits, which are medium large, semi-globe and of good red color.

Pritchard (Scarlet Topper). (70 days.) Wilt resistant and self-topping or self-pruning. Mid-season to late: prolific. Fruits globe-shaped, deep scarlet, smooth and solid. A good home and market variety and very popular for shipping.

Rutgers. (86 days.) A non-acid and disease resistant introduction which has deservedly achieved general popularity. Primarily intended for canning. It has also proved a good green wrap shipper and all-purpose variety. Plant large with thick stems and vigorous foliage. Fruits globular, bright red, with thick walls and small seed cells.

Scarlet Dawn. (70 days.) Fruits medium large, globular, smooth, free from flat side. Attractive bright scarlet color; uniform. Plant of medium growth, fairly open, early and prolific.

Stokesdale. (73 days.) Produces heavy crops. Almost free of stemend crack. Slightly earlier and larger than Marglobe.

Victor. The highly publicized new tomato introduced by the Michigan State College. Fruits are about 3 inches in diameter, globe-shaped and ripen to a deep scarlet. Early.

Yellow Pear. (73 days.) Enormously productive, fine for salads or marmalade. Sweet and delicious. Small, yellow, pear-shaped fruits of exceedingly mild and pleasing flavor. Pkt. 10c; 1 oz. \$1.00.

Yellow Plum. (73 days.) Oval plumshaped fruits, 2 inches long. A clear deep yellow. Used for preserves. Pkt. 10c; 1 oz. \$1.00.

Ground Cherry or Husk Tomato. Fruits small, yellow, enclosed in loose paper husks. Very much prized for preserving. Pkt. 10c; 1 oz. \$1.00.

TURNIP

1 oz. to 100 feet. 2 to 3 lbs. per acre.

For the main crop, sow in open ground from May to July; for winter use, during July and August. Set out in rows 1½ feet apart, allowing a space of 6 inches between the plants. Pkt. 10c; 1 oz. 20c; ½ lb. 75c.

Cow Horn. This variety is pure white; in shape like a carrot, growing nearly half out of the ground, and slightly crooked. It is delicate and well flavored. Used also as a green manuring crop. Table size in 65 days; mature in 75 to 80 days.

Go'den Ball or Orange Jelly. A splendid variety for table use; of excellent flavor. Tops small, cut leaved. Roots globular, commonly 4 inches in diameter. Skin smooth, orange-yellow; flesh yellow, firm, fine grained and of good quality. Rapid grower. Plant during cooler months only. Table size in 60 days.

Purple Top Strap Leaf. A medium early, very productive variety. Tops medium small, upright, strap-leaved. Roots flat, purple red at the top, white below; flesh white, fined grained and tender.

Purple Top White Globe. This variety may be grown to quite a large size without developing signs of coarseness. It is of spherical shape with white skin, the upper one-third being colored reddish purple. Flesh pure white, firm, fine grained and of superior flavor, Good keeper. Fine for table use and stock feeding. Table size in 55 days, mature in 70 days.

Purple Top Yellow Aberdeen. Full size in about 80 days. Of high quality. One of the best keepers. Globular or slightly flattened, usually about 5 inches in diameter, smooth, upper part purplishred, lower part pale yellow as is the crisp, firm, sweet and tender flesh.

Snowball. A desirable sort for home use and early markets. Tops small and erect. Roots medium sized, round, white throughout, sweet, crisp and tender. Table size in 40 days.

WATERMELON

1 oz. to 100 ft., 3 to 4 lbs. per acre.

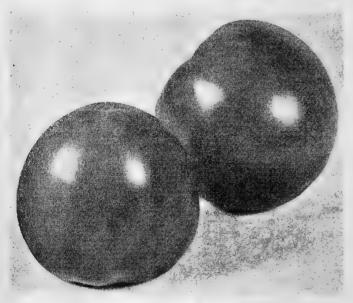
Rich, rather sandy soils produce the finest crops of watermelons, but a well-drained loam, especially with a southern exposure is also suitable. Place 6 to 8 seeds in a circle in each hill, and cover ½ inch deep with fine soil. One ounce will plant 20 to 25 hills; 3 to 4 pounds per acre. Ikt. 10c; oz. 20c.

Black-Seed Ice Cream. The melon is almost round, with a thin medium green rind. The inside flesh is pink and exceptionally sweet and fine flavored. This variety matures early and is fine keeper.

Kleckley's Sweet. A medium size melon, rind very green and flesh deep red. Delicious flavor. An excellent melon for either home garden or shipping. Weighs about 30 pounds.

Klondike. An early sort, a good shipper and popular in Western home gardens. Fruits oblong, slightly tapered, medium sized with slight ribs; rind medium hard. Flesh bright deep red, very sweet; unequaled eating quality.

Blue Ribbon Striped Klondike. An early garden and shipping variety similar to the regular Klondike but with irregular dark green stripes. Wilt resistant Fruits oblong, of medium size. Flesh the deepest red known to watermelons; sweet and crisp, seed small. Fkt. 10e; 1 oz. 30c;



TOMATO BONNIE BEST

Ask us for
information
on the
control of
root maggots
and other
soil insect pests
in your
vegetable garden



WATERMELON STRIPED KLONDIKE

Miller's GARDEN COMPOST MAKER

A 5-pound package of Miller's Garden COMPOST Maker will make several hundred pounds of high-grade organic humus fertilizer by converting garden and kitchen refuse, weeds, leaves, and grass clipings, into a rich organic humus compost.

GARDEN BOOSTER POWDER

Make your own Booster Fertilizer Solution as low as 1c a gallon with Miller's Garden BOOSTER Powder. Stimulates Plant Growth, Root Formation, Fruit Setting, Flower Production. Produces vege-tables rich in flavor and min-erals essential to your Health.

4 oz. pkg. . \$.25 1 lb. pkg. . .50 5 lb. pkg. . 1.50



Insecticide - Fungicide SPRAY or DUST Flower Gardens, Shrubs, Ornamentals

Used regularly controls Powdery Mildew, Black Spot, Rusts, Aphis, Leaf Hoppers, Beetles, Caterpillars.

Effective — Safe to Use.
Contains 5% DDT, Rotenone, Pyrethrum, Sulphur, Fermate.

GARDEN RODUSTO

Insecticide - Fungicide DUST or SPRAY Vegetable Gardens

Safe to use right up to harvest. Controls: Aphis, Flea Beetles, Caterpillars, Powdery Mildew. Contains: Rotenone 1%, Pyrethrum, Sulphur, Copper.

8 oz. pkg. 1 ib. pkg. 5 ib. pkg.









CHAMPION OWNERS INSIST ON

KEN-L-BISKIT

CONTAINING MEAT !!

THE ONLY DOG BISCUIT OF ITS KIND IN AMERICA

*Enriched with all vitamins known to be essential to dog health, Ken-L-Biskit has another PLUS feature that makes it a favorite. Wholesome, nutritious horse meat and meat meal are baked right into this famous dog food.

The favorite biscuit of dog owners everywhere, Ken-L-Biskit helps dogs to develop strong bones, sturdy muscles, and a silky, glossy coat. See how your dog will thrive on healthful Ken-L-Biskit with meat!

KEN-L-BISKIT

THE DOG FOOD OF CHAMPIONS



GARDEN HOSE SPRAY GUNS

Hayes Jr.

The All-Purpose Spray Gun

Full 3 GALLON capacity sprayer, yet easily held in one hand. Replaces heavy expensive spraying equipment. Just attach the Hayes Jr. to your garden hose, press the lever and SPRAY! Sprays up, down, sideways. For spraying vegetable and flower gardens, trees, etc., with liquid or powder insecticides.

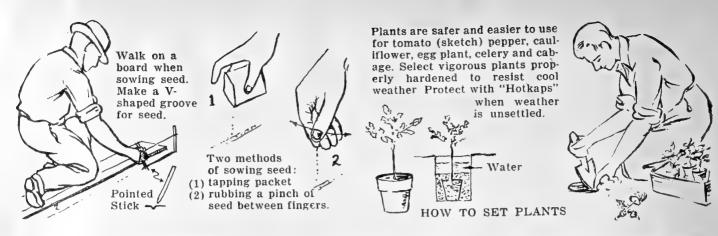




™Hayes-Ette

Ideal Weed Killer Gun (2-4-D)

11/2 GALLON sprayer for small gardens, etc. Ideal sprayer to apply the new 2-4-D weed killer solutions. Weighs only a little over a pound filled. Nozzle adjusts to spray up, down, sideways - with all liquid spray materials free from soap.



WHAT AND HOW TO PLANT

In selecting vegetables to plant include the ones your family should eat as well as the kinds they like. A well balanced diet is most important and should include green vegetables, yellow vegetables, leafy vegetables, root vegetables, and tomatoes.

SOW SEEDS AT RIGHT TIME

Sow seeds at the proper season and avoid waste. We have the highest quality seeds available.

Work down the top soil with a rake until it is level, fine and in perfect physical condition, before attempting to plant seed

Seed should be sown thinly in shallow rills, made with a stick as shown in the sketch. To make the rows straight, follow a line of string stretched between stakes placed at either end of the row. The depth of this rill depends on the variety sown. Check with the depth of planting chart on page 3 before sowing seed.

Seed may be sown directly from the packet, or by rubbing a pinch of seed between the thumb and the first two fingers. This latter method gives a thinner distribution of the seed. Small seeds should not be thicker than 10 to the inch. Sow one row at a time and after each row, cover the seed lightly, touching the loose soil with a rake. Place the board used for walking between the row on top of the sown seed and walk across it to firm the soil for better germination.

Treatment of the seed with "Cuprocide" will eliminate a great deal of damping off, and rotting of the seed after sowing, especially if sown during the wet weather.

If the soil is moist, but not wet, at the time of sowing, watering will not be necessary before the seedlings are up. If it dries out, however, sprinkle carefully so as not to wash out the small seedlings.

USE PLENTY OF GOOD FERTILIZER

Fertilizers are very important. The food value of garden vegetables for human consumption depends greatly on their mineral content, derived from the soil. The vitamin content depends on the vigor of growth and the abundance of sunlight. Therefore, the fertilizing of the soil is important to insure vigorous growth and healthy mineral and vitaminrich vegetables. A good practice is to spade commercial fertilizer, balanced to supply the necessary proportions of nitrogen, phosphorous and potash. Later

in the season, applications of fertilizers in small doses, as side dressings, keep vegetables in active growth. Ask us for special fertilizer formulas for vegetable gardens.

WATERING IS IMPORTANT

Watering will be necessary during the growing season. It should be done early enough in the day to evaporate drops of water from the leaves before nightfall. Water generously, soaking the soil deeply each time, rather than by quick "sprinkles" with the hose. In this way, the roots will grow deep, feed better and be protected from drouth, in case watering is missed during a hot dry spell. Once every week or ten days should be ample for moist soils. No rules can be formulated to determine the necessity of watering. Observation of the soil, and testing with a shovel, will best determine when to water.

SPRAY AND DUST FOR PESTS

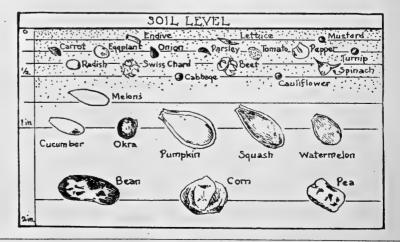
Insects and diseases may infest the vegetable garden but may never become a serious problem if one watches for evidence of damage and takes prompt action. Sprays and dusts are available in convenient packages to combat every garden pest. When spraying cover all parts of the plant and both sides of the leaves. Do a thorough job promptly and avoid a serious infestation.

Success in gardening starts by following certain rules. Whether these be noted from the pages of books or gathered from practical experience makes little difference. The process is the same. Good seed, soil, water, fertilizer, and work makes for success.

If we understand that almost every seed we sow has stored within its shell the ability to sprout and grow into a useful plant we can easily think of the seeds as plants ready to set out which will make the picture of the finished garden clearer in our mind's eye, thus avoiding many of the early mistakes of planting.

Seeds are started by sowing in the soil of the garden. There germination takes place readily when conditions required for growth are met. Fortunately good garden soil, well prepared meets these requirements: soil moisture, usually present after winter rains or supplied by irrigation; soil temperature, heat from the sun and the main reason why certain tender seeds should be delayed in sowing, (until the ground is warm), and air and moisture drainage supplied by the hard work of soil preparation which we have been recommending. As far as fertilizer is concerned young seedlings don't need extra feeding until they have used up the stored food of the cotyledons. It is better to delay feeding until growth is well started and then apply gradually. This is in addition to the humus (manure peat, compost, etc.) and phosphate and other fertilizers put into the soil at the time of preparation. They are deeper down and can be reached by the plants as they grow.

By thinking of the seeds as plants we will sow them far enough apart to reduce drastic thinning. We wouldn't set plants out very close because before long we would not have much of a garden, competition between the plants would reduce the flowers, fruits and shape of the individual plants to an undesired minimum. In both vegetable and flower gardens we strive for perfection in either flowers, fruits or foliage—poor quality is seldom tolerated.



FIELD SEEDS... Write For Our Competitive Prices

ALFALFA

Sow 12 to 15 pounds per acre. Grimm Alfalfa. State Sealed and Certified Seed. Grimm Alfalfa is a very hardy and consistent producer. It is recom-mended for all sections West of the

Ladak Alfalfa. A variety ideally adapted to dry soil which cannot successfully grow the more common varieties. Strongly resistant to freezing. Also gives good results under irrigation in the Northwest.

Common Alfalfa. Universally grown popular long-rooted variety. Best adapted to deep soils.

BARLEY

Sow 120 to 150 pounds per acre. Success Beardless Barley. Spring. Straw about height of common barley. Stands up better than other varieties.

White Hulless or Bald Barley. (Beard-An early spring variety. threshed hulless is like wheat.

Hannchen Barley. Heavy yielding, spring variety, medium early, white, two row, bearded type.

Trebi Barley. Spring. This is a six-rowedbearded, hulled barley adapted to irrigated conditions.

BUCKWHEAT

Sow 50 to 60 pounds per acre. Japanese. This is the largest growing buckwheat. Makes a more vigorous and larger growth than the common kind. Silver Hull. The kernels are gray and are much smaller than the Japanese variety. They are very plump and heavy.

CLOVER

Mammoth Red Clover. Also called "Pea Vine" Clover. This variety grows larger and coarser than the medium and is often used for plowing under to enrich the soil. Sow 6 to 10 pounds per acre. Ladino Clover. Is a very large form of white clover, usually making a growth of 8 to 12 inches. A perennial. Can be grown on rather shallow land where well supplied with humus and moisture. Sow

4 to 6 pounds per acre.

White Dutch Clover, A very hardy creeping clover, which adapts itself to a great variety of soils and climates. Sow 6 to pounds per acre.

Yellow Sweet Clover, Biennial. In great demand on account of its earliness, being about two weeks earlier than the white. Produces high quality hay. Sow

12 to 15 pounds per acre. White Sweet or Bokhara Clover, Biennial. Excellent for pasture and hay. More drought-resistant than alfalfa. Thrives on light alkali soil. Sow 12 to

15 pounds per acre.

Red Clover. Is excellent for pasture and hay. Will thrive in slightly wetter and more acid land than alfalfa. Sow 6 to

10 pounds per acre. Alsike. Very hardy, adapted for sowing on cold, wet land. Planted at the rate of 8 to 10 pounds per acre, it yields a large amount of hay or pasture and is a good

Strawberry Clover. Undoubtedly one of the most satisfactory of recently developed legumes. Resembles White Dutch Clover, but spreads faster and lives longer. Free from insect and disease attacks. Sow 6 pounds per acre.

FIELD CORN

8 to 10 pounds per acre.

Minnesota "13" Yellow Dent. An early maturing yellow dent corn that is a favorite in all corn-growing sections able feed for hogs and cattle.

The stalks are of medium size, the ears 9 to 11 inches long.

Pride of the North. An early maturing,

long-kerneled yellow sort that we recom-mend for any corn district in the west.

FLAX

Flax may be grown with good success in the West. It matures quickly and may be planted as late as the middle of June. Yields 10 to 20 bushels per acre. Sow 42 pounds per acre.

GRASSES

Bromus inermis (Awnless Brome Grass) The best grass we have for the drier regions of the Northwest. Sow 25 to 30 pounds per acre. Spring or fall. Meadow Fescue. This is a very valuable

species for permanent grass lands and is relished by livestock both as hay and pasture. Sow 15 to 20 pounds per acre on well prepared soil.

Mesquite. Used on burned over, virgin soils. No cultivation is necessary Sow seed at the rate of 15 pounds per acre. Oat Grass. Tall Meadow. The earliest grass to start in the spring. For pasture sow 20 to 30 pounds per acre.

Orchard Grass or Cocksfoot. Valuable if planted alone or mixed with other grasses. Seed should be broadcast at the rate of 20 to 28 pounds per acré on well prepared soil.

erennial Rye Grass. A strong growing, hardy perennial grass, noted for its nutritive qualities. Sow 25 to 30 pounds per acre.

Italian Rye Grass. A quick growing grass, attaining a height of 2½ to 4 ft., desirable for temporary meadows or pastures. Sow 25 pounds per acre.

Common Rye Grass. Similar to Italian. The finest rye grass grown; superior to imported Pasture. 25 pounds per acre.

Timothy. This is a very valuable grass for hay, Thrives best on moist, loamy soil. Sow early in the spring or fall at the rate of 8 to 10 pounds per acre.

Irrigation Pasture Mixture. A blend of Number One grade of grasses and clovers especially adapted for growing on irrigated land for permanent pasture. Sow 20 pounds per acre.

Sudan Grass. An excellent annual drought resisting forage plant. All stock relish it. Sow in spring. 20 to 30 pounds per acre.

Red Top. A valuable grass for moist soils. It is a good, permanent grass. It should be grazed close. Sow 10 to 15 lbs. per acre.

Kentucky Blue Grass. This is an excellent grass for pasture for all kinds of stock. It is very hardy. Sow 20 to 25 lbs. per acre.

Crested Wheat Grass. This is the valuable plant for our Western country and

thrives well in semi-arid sections. Sow 10 to 15 pounds to the acre.

Superior Reed Canary Grass. A hardy perennial grass which succeeds in spite of long summer dry periods. Produces a large superior of succeeds in spite of succeeds. large quantity of succulent, palatable forage. Sow 5 to 12 pounds per acre.

MILLETS

Japanese Barnyard Millet. This millet is exceedingly palatable and is the best of summer green feeds for the cool coast sections. Sow 20 to 30 pounds per acre.

German or Golden. Will grow on any good land and yields heavily when irrigated. Yields from 30 to 40 bushels of seed.

Hog or Proso. The seed is large. Feeding value almost equal to corn. It is a valu-

OATS

Sow 60 to 80 pounds per acre. Victory. Grain of medium size, short, plump, white, thin hull, nearly beard-less. A heavy yielder. The straw is stiff and firm.

Swedish Select. Kernel is white, large and plump, hull thin, and straw is stiff and strong. Does not lodge.

Gray Winter Oats. Usually hardy. Seeded in winter, fall or early winter. May be sown in the spring for hay along

FIELD PEAS

Austrian Winter Peas. Here is the ideal forage legume for hay, ensilage or for pasture. Austrian Winter Peas under many conditions will outyield vetches. Sow 75 to 90 pounds per acre. Canadian. This legume has the distinct

advantage of being suited to late planting. Canadian Field Peas produce excellent forage. May be used for summer green manure crop. Requires consider able moisture. Sow 120 to 150 pounds per acre.

RYE

Sow 85 to 115 pounds per acre. Spring Rye makes a successful growth in rather poor soils where other grains would fail. Makes early pasture and may be cut and cured for hay.

Winter or Fall Rye serves a very useful purpose for pasture and hay. May be sown in the spring and summer as well as in the fall.

Rosen or Petkuser Rye. A winter variety of recent introduction, it is becoming very popular among growers of winter

RAPE

Dwarf Essex. This crop is very highly recommended for pasturage for sheep, cattle, and hogs. It also makes splendid green feed for poultry. Plant 10 pounds per acre, in early spring.

SOYBEANS

Soybeans are annual legumes widely adapted to various soils and not difficult. to grow on the warmer more fertile soils. Are excellent as a summer catch crop and splendid soil builders.

VETCH

Sow 40 to 60 pounds per acre. Common Vetch. Resembles peas and valuable for forage and green manure. As a hay crop it is generally sown with oats or wheat to afford support for the vines.

Hairy Vetch. Thrives on all soils. Makes a better growth during the cold season than the other varieties.

Hungarian. Finer stemmed and leafier than most forage vetches. Suitable to various types of soils. Resistant to aphids.

WHEAT

Sow 75 to 90 pounds per acre. Marquis Spring Wheat is the standard, hard, red spring wheat for irrigated sections of the West. It is early maturing and high yielding. It is beardless, short, stiff-strawed.

Turkey Red Winter Wheat. A standard red bearded wheat with a strong straw. It is early ripening. Kernels are large, red and hard. It is in good demand by

Thompson Club or White Russian Wheat The most widely used spring wheat planted in the irrigated districts of Eastern Washington and Oregon. It is a beardless, soft white variety which outyields all other common varieties.



HASTINGS

SOIL-SOAKER

Made of canvas — scientifically treated to resist mildew. SOIL-SOAKER is open only at one end and screws to the end of the water hose, replacing the nozzle. When the water is turned on, SOIL-SOAKER fills with water and normal pressure forces water through the pores of the entire

surface, uniformly, without spray. Easily moved without shutting off water, or getting wet. Self-cleaning. The soil is soaked deeply and thoroughly, covering an area on all sides of the SOIL-SOAKER. Far more beneficial than light surface-sprinkling. Puts the moisture down into the soil. Avoids water waste,

SOIL-SOAKER enables you to put the water exactly where you want it—none sprayed on walks, driveways or other places you do not want to reach. Excellent for irrigating around plants where moisture is apt to damage foliage. Water deep with a **SOIL SOAKER.** Two lengths. 18-ft. \$2.15, postage paid; 30-ft. \$3.25, postage paid.



Actual survey figures prove it! They show 9 out of 10 dogs like Gaines f om the start! And Gaines offers them the very food factors they're known to need. Easy and economical to feed! Just add water—nothing else to GAINES.

GAINES MEAL

- 1	lb.	in	bu	lk							٠.			٠					\$.1:	5
																			1.00	
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50	lb. s																		5.7	5
F.O.B. Portland, add postage.																				

SPEEDLINE GARDEN TOOLS

MADE ESPECIALLY for the GARDEN!

Light, keen, fast . . . small enough for use in flower beds but strong and balanced for real, hard work.

18 NUMBERS OF THE HIGHEST QUALITY TOOLS:













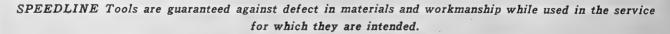




Soil Stir, Sharpshooter, Speedy Cultivators (4 & 3 tine), Lawn Broom (adjustable width), Garden Shovel, Push-Pull (the crust breaker),

Turf Edger, Dandelion Rake and Weeder, Garden Rakes (Round Bow Pattern or Level Head), Spading Forks (Light and Heavy), Warren (heart shaped) Hoe, Two Prong Hoe, Regular Garden Hoe, Narrow Nursery Hoe ($2\frac{1}{2}$ inches).

These are the Blue-Handle-and Gold Trim Tools you've known about. Put them to work in your own garden. They're reasonable in price, a delight to use and to own.



The UNION FORK & HOE CO., Columbus, Ohio

SPRATT'S DOG AND PET FOODS



SPRATT'S DOG BISCUIT FOODS

For over 80 years the best-known dog foods in the world. Contain "Meat-Meal Filbrine"—baked into the biscuits. A complete, well-balanced food for all breeds of dogs.

Spratt's Dog Foods are supplied either in biscuit form or granulated (broken up). They can be fed dry or mix d with vegetables, gravy, broth, etc. For grown dogs one heavy meal in the evening is enough with a few dry biscuits in the morning.

Spratt's-fed dogs are healthy dogs. Their teeth and gums will be firm, their digestion normal, coat glossy and breath sweet and pure. Bowel trouble and skin disorders, so common in dogs fed on soft and sloppy foods, will be conspicuous by their absence.

Spix Dog Biscuits. The bone-size biscuits for all dogs. Convenient shape, easy for the dog to grasp. Ideal for all medium and small breeds. (For large breeds see Dog Caces, large, square biscuits.) Per lb. 20c.

Fibo. Granulated food (about the size of peas). For dogs of all ages, breeds or condition of health. Contains pure yolk of egg in addition to meat meal. Very nourishing and appetizing. Per lb. 2.cc.

Ovals. Small oval biscuits. Wonderful for all breeds, especially small dogs. Contain plenty of meat meal; crunchy and satisfying. Convenient to carry in your pocket when on a walk with your dog. Per lb. 25c.

Charcoal Ovals. Same as Ovals with pure Charcoal added-black in color. Absorb intestinal gases and impurities, wonderful safeguard against intestinal and stomach ailments. Every dog should have two full meals of these each week; meat-fed dogs even oftener Per ib. 25c.

Dog Cakes. Large, square cakes; the staple diet for the large and medium breeds. Should be fed dry. Per lb. 25c.

Assorted Dog Biscuits. A variety of several of Spratt's most popular Dog Biscuits. Contain Spix, Ovals, Charcoal Ovals and Cod Liver Oil Ovals. Per lb. 25c.

CAT FOODS

Cat Food. A granulated food for all cats. Contains meat meal, fish and milk—a well-balanced and complete food. Can be fed dry or mixed with meat, sard ne oil. etc. Pags. 1 c and 40c. Catnip Leaves. Choice catnip leaves and tops. 20c per pkπ. Catnip Mouse. A cloth mouse filled with catnip. 15c each.

PUPPY FOODS

Puppilac. A full cream powder, for feeding very young puppies, hand-feeding orphans, etc. Can be fed from birth until wearing time. Richer than cow's milk, the ideal substitute for the mother-dog's natural milk, 10-oz. pkg. \$1.00.

Pepsinated Puppy Meal. For feeding young puppies before and after weaning. Contains pure pepsin, extrem ly assimilative. 12-oz. pkg. 40c. Plain Puppy Meal. The standard weaning food. For feeding puppies until old enough to eat more solid food. 12-0z. pkg. 20c.

Prices for Larger Quantities on Application

DOG SUPPLIES

Flea Powder. In shaker-top tins. Highly effective for ridding your pets of fleas (non-poisonous). Per pkg. 50c.

Dog Soap (White). The id al soap for the dog's bath. Produces beautiful glossy coat, leaving skin clean. Non-poisonous—but will kill fleas.

Flea Soap (Black). To be used when the dog is bothered by fleas. Healing and disinfecting. Lathers freely, cleans thoroughly, kills fleas. Per bar 30c.

Spratt's Liquid Shampoo. A scientific preparation which will be found most effective in cleansing and keeping the coat in good condition. Also aids in the elimination of doggy odors. This shampoo is also recommended for use on the human head. Leaves the hair both soft and silky and the scalp clean and free from dandruff. Per bottle 35c.

Spratt's Dry Clean Powder. For dry cleaning all dogs. Especially recommend d dring cold and inclement weather when it is not advisable to wash dogs. Will clean dog's coat thoroughly and also eliminate doggy odors. Per package 30c.

BIRD FOODS

Roller Canary Mixture. The best mixture of imported seeds obtainable, also contains fruit flakes and egg. The ideal diet for canaries. 40c pkg.

Mixed Bird Seed. A combination of recleaned seeds for all canaries. The standard daily diet. Air-washed and free from all dirt and chaff. 30c per pkg.

Parrot Mixture A mixture of food for all parrots; clean and wholesome. 40c per pkg.

Love Bird Mixture. A special mixture of seeds required for lovebirds and parrakeets. 30c per pkg.

Bird Gravel. For all cagebirds. Carefully selected gravel of uniform grade. 1sc per 2-lb. pkg.

Cod Liver Oil Nestling Food. For feeding young birds and for all canaries and other cage birds the year around, as a change. Staminabuilding, bone-making. 15c and 30c per pkg.

Moulting Food. For the moulting season. A wonderful feather producer. 30c per pkg.

Song Focd. Invigorating tonic food for canaries. Stimulates song. Can be used the year around with wonderful results. 25c per pkg.

Silvertone Pick-me-up. Famous old English food for canaries. A treat and tonic food of great value. 25c per pkg.

Bird Tonic. To be put in the bird's drinking water. A general tonic, for loss of song, colds, hard breathing, moulting period, etc. 15c and 30c per bottle.

Bird Lice Powder. A lice powder to be dusted into the bird's feathers. In bellows. 30c each.

FISH FOODS

Aquarium Fish Food, For Goldfish. A perfect substitute for insect life, etc. Will not foul the water. In sprinkler-top packages. 10c and 35c.

Wafer Fish Food. For those who prefer a food in wafer form. 10c.

Zeke Turtle Food (Dried Flies). The ideal food for turtles, etc. 15c.

Recto. Remedy for fungus in aquarium fish, also for tail rot, white spots, etc. A water purifier and rectifier. 25c per tin.

DOG MEDICINES

Dog Worm Capsules. A vegetable preparation for ridding dogs of large round worms (ascarids). Safe and harmless, but highly effective. 10c-60c.

Puppy Worm Capsules. For puppies and toy dogs. 10c and 60c.

Tonic. A general tonic for all dogs; to build up the system. 10c and 60c.

Constipation Tablets. Will relieve constipation in dogs and puppies.

Mange Liquid. For treating certain forms of mange and eczema. 75c

Sulfur Tablets. For cooling the blood; skin disorders, scratching and itching. 60c.

Special Tablets. For distemper in dogs, puppies and cats; fever reducer, diaretic and stimulant. \$1.00 per pkg.

Spratt's Cough Tablets (for coughs due to colds). A method of treating this condition. Per package 60c. An easy and effective

Spratt's Diuretic Tablets. Recommended for treatment of kidney and bladder disorders. A soothing preparation which aids in the secretion and discharge of urine. Per package 60c.

Spratt's Dog Trot. It aids in keeping dogs away from females when in season. Safe and pl. asant to use. Per package \$1.00.

Spratt's Ear Canker Ointment. An effective and highly recommended remedy for treating ear canker. Per package 75c.

Spratt's Calcium Phosphate (Tribasic). A splendid bone builder. An admirable adjunct in the feeding of propies particularly those of the larger breeds. It may also be given to bitches before whelping. It is easily assimilated and has no irritating effects upon the stomach. 8-oz. package 50c.

Spratt's Cod Liver Oil Capsules. An easy and effective method of giving Cod Liver Oil to dogs. For the purpose of overcoming Vitamins A and D deficiencies r sulting perhaps from lack of sunshine. Also intended for treating rickets. Per package 60c.

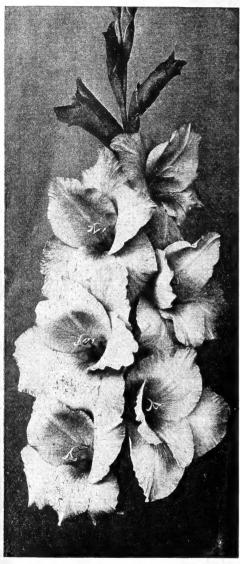
BOOKS AND LITERATURE

Spratt's Dog Book (Free). Forty-eight pages of "doggy" information. Complete, accurate and up-to-date. Write for your copy—it's FREE.

Canaries, Their Varieties and Management. A complete treatise on canaries, their breeds, care, breeding, ϵtc . Price 10c.

Cat Culture. The care, feeding, breeding, etc., of cats. The different breeds, ailments and their treatments, etc. Price 35c.

Gladiolus



PICARDY

Algonquin. Brilliant glowing scarlet, 8-10 wide, open ruffled needlepoint blooms on a tall straight spike.

Barcarole. (Palmer). Large clear grenadine orange with no markings. Beautifully ruffled blooms of heavy substance. One of the best new orange varieties.

Beacon, (Palmer). Clear bright rose-scarlet with a large cream blotch; medium large, slightly ruffled, 8 to 10 open on a very tall straight spike.

Bit o' Heaven. Beautiful shade of orange with a yellow throat. Opens 9-12 medium sized blooms on a tall, straight plant.

Black Opal. Probably the darkest of all gladiolus, the color being a deep black red. The finest of the dark shades.

Blue Beauty. (Pf.) Light blue, shading darker toward the edges, giving the appearance of medium blue. Large wide open round flowers.

Candy Heart (Salbach). Clear flesh pink with large blotch of light carmine; 5 to 6 open blooms at one time.

Chamouny. Cerise rose, silver edged flowers of medium size, round and lightly ruffled. 8 to 10 flowers open at a time. A most distinct and beautiful mid-season variety.

Commander Koehl. (Pf.) Large dark scarlet red, without marking or blotches. Individual florets 61/2 inches across, of which there are six or seven open at a

Dr. F. E. Bennett. (D.) The popular, well known fiery red. One of the most brilliant scarlets grown. Fine large flower.

E'izabeth the Queen. Clear lavender-mauve flowers beautifully ruffled and shaped. An outstanding variety for show or cutting.

Glamis. Clear salmon-rose with cream lip. The very large, wide open flowers are borne on plants 4 to $4\frac{1}{2}$ feet tall.

Golden Chimes. Long straight spikes bear large flowers of a beautiful yellow. Perfect form.

Greta Garbo. Creamy rose shades to light pink. Perfect florets, well placed on straight spikes. Wonderful show

J. S. Bach. (Pf.) Salmon with white midrib. A wonderful exhibition variety with as many as eight florets open on tall spikes. One of the largest of the early blooming Gladiolus.

King Lear. Clear, deep reddish purple with silver line on edge of petals. 5-6 blooms open on a tall, strong, slender

Margaret Beaton. (Twomey.) One of the most beautiful blotched varieties. Tall, large and white with small scarlet feather. Opens about eight flowers. Good propagator.

Minuet. (Coleman). Wonderful clear lavender. A lavender by which all others are judged. Six or seven wide open florets open at a time. Arranged perfectly on straight spike.

Mother Machree, A beautiful combination of a wine-tinted lavender overlaid with salmon-pink.

Pelegrina. The large deep blue flowers have a strong appeal due to their color and fine arrangement of the florets.

(Palmer). Color soft apricot Picardy. pink with a silvery sheen, feathering of slightly deeper color in the throat. The individual florets are extremely large, sughtly ruffled and of a heavy waxlike substance.

Rosa Van Lima. Light rose with a few darker lines in the throat. Up to 8 or more well placed blooms on a tall strong spike prolific.

Shirley Temple. (Pruitt.) Creamy-white with a darker throat. Individual florets over 6 inches across, with 6 or 7 open Splendid grower.

Snow Princess. An excellent white variety for exhibition and cut flowers. Tall, vigorous grower.

Takina. A recent Australian introduction. Violet-purple.

Vagabond Prince. (Palmer.) Iridescent garnet-brown, lighter in upper throat and small blotch of glowing scarlet-red on lip petals. 8 to 10 open on tall straight spike. Prolific.

White Gold. Huge creamy white blooms, golden yellow in the throat. A vigorous grower with good straight stems.

Yellow Emperor. (Ellis.) Large flowered deep yellow. Vigorous grower. Best yellow in its class.

TUBEROUS BEGONIAS

ering bulbs of easy culture are ideal for shade. Along the coast of Oregon, Washington and California they are among the most popular flowers of today. Our bulbs are from selected strains.

Plant indoors in a warm place in February or March in moist sand or peat rebruary or March in moist sand or peat moss just covering the bulb. Pot up when well sprouted in a mixture of peat moss, humus or soil. Plant out-doors after danger of frost (early May in this section). They do best on the north side of a building or other location where they are shaded much of the day. To be successful prepare soil carefully and add liberal quantities of peat moss or well decayed leaves. Keep well watered and fertilized. Dig and store in Warning — Failure is likely to result from planting dormant tubers in open ground, especially if it is cold and wet.

DOUBLE CAMELLIA TYPE

The largest and most popular types. Individual flowers from 4 to 8 inches in diameter, resemble Camellias and Roses, in all forms and variations in color.

Colors: White, yellow, cardinal red, pink. rose, blush, dark red, orange, apricot, flame orange.

Prices Tubers-Delivery January-March. Large size 11/2-2 inches at 40c each; \$3.50 per dozen.

SINGLE FRILLED TYPE (CRISPA)

Perhaps the most adorable of the single types—beautifully frilled and ruffled on the edge.

Colors: Orange, apricot, red, salmon.

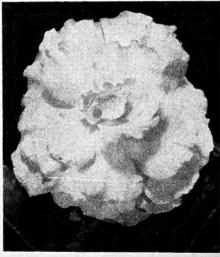
Tubers—Delivery January-March. Large size 1½2 inches at 35c each; \$3.50 per dozen.

TIGRIDIA OR MEXICAN SHELL FLOWER

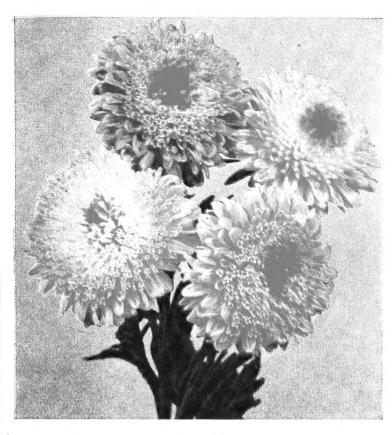
Bright, fantastically colored summer blooms lasting until frost. A most satisfactory summer bedder for fall sun.

Give the same treatment às gladiolus. planting 4 inches deep and 6 inches apart from late February until May Ordinary garden soil in full sun. Enjoys plenty of moisture. Mixed Colors.





BEGONIA DOUBLE CAMELLIA



PRINCESS ASTER



SUPER MAJESTIC SNAPDRAGONS

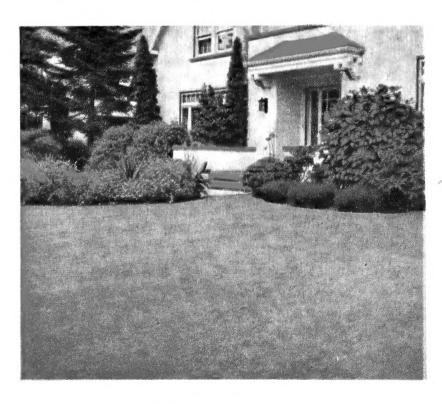


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Two entirely new colors in Sensation Cosmos: Striking deep rose and rich crimson, in the first bi-color Cosmos ever developed.

FOR A LAWN LIKE THIS—You will need good seed of the right kind. Our lawn seed is selected for quality. Our knowledge of lawn making in this region enables us to offer you the right kind of lawn seed to fill your needs. The best seed is the least expensive in the long run because it will give better coverage and a thicker, longer lived turf.





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